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“УЖГОРОДСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ”

КАФЕДРА ІНОЗЕМНИХ МОВ

**Навчально-методичний посібник**

**“Англійська мова для студентів спеціальності “Стоматологія”**

**English for dentistry students**

Ужгород – 2024

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Мета навчально-методичного посібника – забезпечити формування мовленнєвої компетенції студентів у сфері професійного спілкування в усній та письмовій формах.

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ПЕРЕДМОВА

Пропонований навчально-методичний посібник призначений для студентів-стоматологів університетів, інститутів, коледжів.

Посібник розрахований на осіб, які продовжують вивчення англійської мови на базі знань, отриманих у середній школі. Він складений відповідно до вимог програми для студентів немовних факультетів і має чітко виражену професійну спрямованість, яка проявляється в тематиці навчальних текстів, характері методичних завдань, у вправах і спеціально відібраних прикладів активного словника стоматологічної термінології з даного лексичного матеріалу. Лексиксичні матеріали сприятимуть навичкам читання і розуміння оригінальної медичної літератури, мовлення (діалогічного і монологічного) та письма на фахову тематику й розвитку вмінь логічної аргументації у студентів.

Кожна розмовна тема фахового спрямування включає роботу із текстом, за яким слідують завдання, що потребують від студентів індивідуальної відповіді, висловлювання своїх думок, включають їх у комунікативний процес.

Навчально-методичний посібник включає 31 розмовну тему фахового спрямування. Кожна розмовна тема містить 1) текст інформативного характеру, який допоможе орієнтуватися у певних ситуаціях професійної сфери, 2) лексичний матеріал із найчастіше вживаними мовленнєвими одиницями відповідної тематики та 3) систему вправ для успішного засвоєння і вдосконалення комунікативних навичок професійного спілкування.

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UZHHOROD NATIONAL UNIVERSIRY

DENTISTRY FACULTY

**Active Vocabulary**

|  |  |
| --- | --- |
| **to leave school**  **to graduate from university** | закінчити школу  закінчити університет |
| **to take an interest in** | цікавитися |
| **to make up one's mind** | вирішити щось |
| **to take up dentistry** | вивчати стоматологію |
| **to devote oneself to** | присвятити себе ч/н |
| **a student membership card** | студентський квиток |
| **a student assessment record book** | залікова книжка |
| **a library card** | читацький квиток |
| **a synopsis of lectures (notes)** | конспект лекцій |
| **in order to become good specialists** | для того, щоб стати хорошим спеціалістом |
| **be in the first year/ the faculty** | навчатися на першому курсі/ на факультеті |
| **be a first-year student/**  **Am.E freshman / Br.E. fresher**  **a sophomore am.**  **a monitor** | навчатися на першому курсі  “свіжачок”, першокурсник  студент другого курсу вузу  староста |
| **to be going to do smth.** | збиратися щось робити |
| **by which I am greatly attracted** | (тут) який мене дуже зацікавив |
| **to take a course in ...**  **a course of study**  **compulsory courses**  **elective courses (electives)**  **optional courses** | вивчати (предмет)  курс навчання  обов’язкові предмети  обов’язкові курси за вибором  курси за вибором |
| **to attend /to go to classes**  **be present at classes**  **be absent from classes**  **to skip/cut/ miss classes**  **to disrupt classes** | відвідувати заняття  бути присутнім на заняттях  бути відсутнім  пропускати заняття без поважної причини (втікати із занятть)  зривати заняття |
| **to do well at university /**  **to keep up with one’s studies** | добре вчитися в університеті |
| **to cope with** | справлятися з |
| **to fall / lag behind with one’s studies** | відставати у навчанні |
| **to cram** | зубрити |
| **a crib** | шпаргалка |
| **to burn the midnight oil** | засиджуватися допізна |
| **Dean**  **Vice-dean**  **Dean’s office**  **Head of Department**  **Faculty Adviser**  **Guidance Counselor**  **Tutor**  **Associate Professor** | декан  заступник декана  деканат  завідувач кафедри  куратор  методист  репетитор, викладач  доцент |
| **Master** | ступінь магістра |
| **Diploma with Honor** | диплом з відзнакою |
| **to do well on the exam**  **to do poorly on the exam**  **to sit/take an exam**  **to pass the exam**  **to fail the exam**  **to cheat on the exam**  **to resit (an exam)** | добре скласти іспити  погано скласти іспити  складати іспит  скласти іспит  “провалити” екзамен  списувати на іспиті  перескладати іспит |
| **a grade** | оцінка; рік навчання або клас |
| **a curriculum**  **a syllabus** | навчальний план  робоча програма |
| **graduation paper/thesis** | дипломна робота |
| **full-time study**  **part-time study** | денне навчання  заочне навчання |
| **accommodation**  **a dormitory (dorm) / residence hall(Am.E)** | проживання  гуртожиток |
| **to meet a deadline** | виконати роботу/завдання вчасно (до вказаного терміну) |
| **to expel (exclude) from the university** | відрахувати з університету |
| **to do one’s best** | робити все можливе |
| **to study by fits and starts** | вчитися час від часу |
| **to take one’s parents way** | піти шляхом батьків |

**I. Read and translate the following text:**

**AT UNIVERSITY**

Let me introduce myself: I am \_\_\_\_\_\_\_\_\_\_\_\_a student at Uzhhorod National University. Now I am a freshman, as they put it in America, and I am doing dentistry. I take a full course of dentistry, let alone some other things. I must say I take a special liking to the subjects in which I am going to major.

It was shortly (long) before leaving school that I made up my mind to enter this faculty and take up dentistry seriously as my future specialty. It’s great to be a student. Many colleges and universities offer great opportunities for studying and for social life.

The Uzhhorod National university is a classic university founded in 1945. It is one of the biggest and best universities of the Carpathian region, situated in Uzhhorod. The studies at university began in February 1946. 167 boys and girls were enrolled to the university at that time. There were 4 faculties at that time: the faculty of Biology, History, Medicine and Philology.

The university staff consists of doctors of science, professors, candidates of science (Doctors of Philosophy), Corresponding Members of National Academy of Sciences of Ukraine, academicians of the Academy of Sciences of Ukraine, inventors, masters of sport.

The university offers undergraduate, graduate and postgraduate courses. The university has several scientific periodicals that are published annually.

The university has a huge scientific library; a Museum of Zoology; Botanic Garden with more than 500 species of trees and bushes, and about 450 subtropical and tropical crops; observatory; cryogenic station, well-equipped laboratories, computer centres, etc.

Housing for the students is offered by six residence halls. There are kitchens, bathrooms with showers, and laundries. The gyms with fitness equipment allow the students to train arm wrestling and martial-arts training. The access is granted at any time and is free.

I must say the first day at university was unforgettable. We met our Dean … who spoke about the subjects we were to study and various departments of the faculty. He also told us that in order to become good specialists we would have to work hard: attend all classes. As well as lectures, there are regular seminars at which one of a small group of students will have to read a paper he or she has written. The paper is then discussed by the tutor and the rest of the group. Beginning with the second year we have to present a year paper to their scientific advisors. At the end of each term we will take several examinations and credit-tests.

During the first two years the students study Physics, Chemistry, Anatomy, Biology, Histology, History of Medicine, Latin, foreign languages and other pre-clinical subjects. Senior students study Therapy, Surgery, Obstetrics, Gynaecology, Ophthalmology, Dentistry and others. To make good progress in these and other subjects, medical students must work hard on them.

During the lectures we make notes of new and interesting facts and listen to the lecturer attentively. Sometimes we work in a laboratory. We know that we shall need deep knowledge of many subjects in our future work.

During the working day we will have several short breaks, so we will be able to have a snack in the cafeteria, or share the latest news with our friends.

We have practical training at hospitals and polyclinics. Senior students acquire such practical skills, as to examine patients, to make a diagnosis, to prescribe proper treatment, and to fill in case histories.

And some words about my faculty.

The Faculty includes different departments, that of: Department of Surgical Dentistry, Maxillofacial Surgery and Oncostomatology; Department of Therapeutic Dentistry; Department of Pediatric Dentistry; Department of Orthopedic Dentistry; Department of Basic Medical Disciplines.

I am sure I'll enjoy my studies at university. I hope after studies I’ll become a good specialist in dentistry.

**II. *Answer the questions:***

## 1. When did you decide to enter this faculty?

## 2. Did anyone help you to choose the university to enter or it was your own decision?

## 3. What are your first impressions as a “freshman”?

4. What are your expectations of studying at the university?

## 5.Who is the monitor of your group? What are his/her duties?

## 6. What for do you need student membership cards, student record books and library cards?

7. Who was the first person you acquainted with at university?

8. What departments are at your faculty?

9. What do you want to become after graduation?

10. What are the advantages of living at home and at the residence hall?

*III. Fill in the gaps using the words and expressions from the text:*

1. I … of mathematics, let alone some other things.

2. It was shortly (long) before leaving school that I … my mind to enter this faculty and … mathematics seriously as my future specialty.

3. Housing for the students is offered by six … with 4 thousand places available.

4. Our Dean told us that as well as lectures, there are … at which one of a small group of students will have to read a paper he or she has written.

5. Twice or three times a week students have … .

6. I am a … student, so I will have to attend classes every day.

7. We will have … and … in different subjects and the most of them are compulsory.

8. We’ll have a … in our group whose responsibilities are not very clear for us

9. The university offers undergraduate, … courses.

10. I hope after studies I’ll become a good … dentystry.

*IV. Find another way of expressing the parts in italics. Consult the text:*

1. Now I am a *first-year* student and I am doing mathematics.

2. I must say I like the subjects in which I am going to major very much.

3. I take a full course of mathematics besides some other things.

4. For most students it is the first time that they *made a break from* home.

5. After finishing school I decided to become a university student.

6. If you ask me why I have taken up physics for a special study, my answer will be: I am very much interested in it.

7. English was the subject he liked bestat school.

8. I am sure my sister will finally become a good teacher.

9. Since I want to pass my exams successfully I cannot *stay away from* classes.

10. At the end of each semester we will have to *sit* credits and exams.

***V. Paraphrase the following sentences using your active vocabulary:***

1. Jo **sits late at night** preparing for her classes.

2. Dan constantly **misses classes** without any serious reason.

3. Pete failed all his exams. It’s possible that the Dean’s office **will not let him continue his studying** at the university.

4. Josh **is fond of shouting, disputing and arguing**. The lecturer always puts him bad marks for his indecent behavior.

5. Martin **didn’t pass the exam** yesterday.

6. Brenda **was absent** at the class. She was at the hospital.

7. The lecturer asked Steven to leave the examination test as **he was looking up words in the dictionary** and it was forbidden.

8. Maria will probably graduate with **good marks**. She is the best student in the group.

9. Betty is a **freshman.** She doesn’t know much about the university life yet.

10. Ann **lags behind** the group.

**HISTORY OF DENTISTRY**

***Active Vocabulary***

|  |  |
| --- | --- |
| **to alleviate** - полегшувати, пом’якшувати  **barber** - перукар, цирюльник  **boar** – кабан  **bristle** – щетина  **coarse** – грубий  **engine** – бор-машина  **to exist** – існувати  **extraction** – видалення  **filling** – пломба  **frayed** - пошарпаний, потріпаний; поторсаний; пом’ятий  **gum** – ясна  **jaw** – щелепа  **nitrous oxide** – окис азоту  **procedure** – процедура  **prosthesis** – протез  **root** - корінь  **stiff** – жорсткий, негнучкий |  |
| **to suffer** – страждати, хворіти  **toothache** – зубний біль |  |
| **tooth decay** – гниття зуба, карієс |  |
| **to treat** – лікувати  **treatise** – трактат, наукова праця  **twig** – прутик, гілочка |  |

***I. Insert the missing letters and translate the words and word-combinations:***

Dent\_stry, dise\_ses, toot\_ache, ca\_se, an\_ient, g\_m, j\_w, bl\_od, proc\_dure, too\_h, chron\_c, prosth\_sis, deca\_, cro\_n, flu\_ride, tooth\_rush, pre\_entive.

***II. Read and translate the following text:***

**History of Dentistry**

Each science has its own history. Dentistry is not very old branch of medicine but its roots came from the early years of existing of the human being.

It is known that prehistoric man suffered from the same dental diseases as people do nowadays. The first mention about toothache was found in Mesopotamia. Some inhabitants of Mesopotamia stated that the cause of tooth decay (caries) was the worm. This is logical, as the holes created by cavities are somewhat similar to those bored by worms into wood. The ancient Hindus inserted gold into holes. They used extraction tools and other dental instruments; they also treated gum diseases. In ancient China toothache was treated by acupuncture. In Egypt lost teeth were replaced with extracted ones from slaves and they were held by gold wire.

Ancient Greek scholars Hippocrates and Aristotle wrote about dentistry, including the eruption pattern of teeth, treating decayed teeth and gum disease, extracting teeth with forceps, and using wires to stabilize loose teeth and fractured jaws. Galen was the founder of theory that decay was caused by disturbance in the blood.

Historically, dental extractions have been used to treat a variety of illnesses. During the Middle Ages and throughout the 19th century, dentistry was not a profession in itself, and often dental procedures were performed by barbers or general physicians. Barbers usually limited their practice to extracting teeth which alleviated pain and associated chronic tooth infection.

The first dental textbook written in English was called "Operator for the Teeth" by Charles Allen in 1685. It was between 1650 and 1800 that the science of modern dentistry developed. It is said that the 17th century French physician Pierre Fauchard started dentistry science as we know it today, and he has been named "the father of modern dentistry" because his book “The Surgeon Dentist, A Treatise on Teeth*”* was the first to describe a comprehensive system for caring for and treating the teeth. Among many of his developments were the extensive use of dental prosthesis, the introduction of dental fillings as a treatment for dental caries.

The first dental foot engine was built in 1790 by John Greenwood and one of George Washington’s dentists. It was made from an adapted foot-powered spinning wheel. In 1871, George F. Green invented the first electrical dental engine.

1790 was a big year for dentistry, as this was also the year the first specialized dental chair was invented. It was made from a wooden chair with a headrest attached.

The First Dental School was founded in 1840. Chapin Harris and Horace Hayden founded the Baltimore College of Dental Surgery, the first school dedicated solely to dentistry. The college merged with the University of Maryland School of Dentistry in 1923, which still exists today.

Dentistry has seen a great deal of innovation over the past 100 years. In 1903 Charles Land devised the porcelain jacket crown. In 1905, Alfred Einhord, a German chemist, discovered Novocain. In 1938, the first tooth brush with synthetic nylon bristles hit the market. In 1945, the water fluoridation era began when the cities of Newburgh, NY and Grand Rapid decided to add fluoride to the public water supply. In 1950, the first fluoride toothpastes are marketed. In 1957, John Borden invented the first high speed electric hand drill. In the 1960s, the first dental lasers are developed and used for soft tissue procedures. The 1960s also saw the invention of the first electric toothbrush.

The 1990s marks the beginning of the era of cosmetic dentistry, with the increased popularity of veneers, bleaching, and dental implants.

With the advent of the 20th century dentistry continued to progress on many fronts including technology, oral hygiene, preventive dentistry and dental education.

***III. Find in the text the equivalents for the following words and word-combinations:***

Стоматологія, профілактична стоматологія, хвороби зубів, видалення зубів, зламана щелепа, хвороби ясен, утримувати зуби разом, французький лікар, карієс, лікувати каріозний зуб, стоматологічні процедури, хронічна інфекція зуба, застосування зубних протезів, електрична бормашина, присвячуватися виключно стоматології, підголовник, електрична зубна щітка, порцелянова коронка, зубна паста з умістом фтору, м’які тканини, косметична стоматологія, відбілювання зубів, фторування водопровідної води, ручна бормашина.

***IV. Answer the following questions:***

1. Is dentistry a new branch of medicine?

2. What did the ancient Hindus insert into holes?

3. How were lost teeth replaced in ancient Egypt?

4. What was the idea of tooth worm hypothesis?

5. What did ancient Greek scholars Hippocrates and Aristotle write about dentistry?

6. When was the science of modern dentistry developed?

7. Who is said to be the father of modern dentistry?

8. When was the first dental foot engine built?

9. What was the first school dedicated solely to dentistry?

10. What are dental inventions of the XX century?

***V. Insert the missing words:***

1. Dentistry has seen a great deal of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ over the past 100 years. 2. The first dental foot \_\_\_\_\_\_\_\_\_ was built in 1790 by John Greenwood. 3. Barbers usually limited their practice to extracting teeth which alleviated **\_\_\_\_\_\_** and associated chronic tooth infection. 4. Prehistoric man suffered from the same dental \_\_\_\_\_\_\_\_\_\_\_\_ as people do nowadays. 5. Galen was the founder of theory that \_\_\_\_\_\_\_ was caused by disturbance in the blood. 6. John Borden invented the first high speed electric hand \_\_\_\_\_\_\_. 7. The 1990s marks the beginning of the era of \_\_\_\_\_\_\_\_\_\_\_ dentistry. 8. The first tooth brush with synthetic nylon \_\_\_\_\_\_\_\_\_\_ hit the market.

***VI. Read the following information and compose the dialogue:***

**Who invented the toothbrush and when was it invented?**

The toothbrush as we know it today was not invented until 1938. However, early forms of the toothbrush have been in existence since 3000 BC. Ancient civilizations used a "chew stick," which was a thin twig with a frayed end. These 'chew sticks' were rubbed against the teeth.

The bristle toothbrush, similar to the type used today, was not invented until 1498 in China. The bristles were actually the stiff, coarse hairs taken from the back of a hog's neck and attached to handles made of bone or bamboo.

Boar bristles were used until 1938, when nylon bristles were introduced by Dupont de Nemours. The first nylon toothbrush was called Doctor West's Miracle Toothbrush. Later, Americans were influenced by the disciplined hygiene habits of soldiers from World War II. They became increasingly concerned with the practice of good oral hygiene and quickly adopted the nylon toothbrush.

Some other interesting toothbrush facts:

The first mass-produced toothbrush was made by William Addis of Clerkenwald, England, around 1780.

The first American to patent a toothbrush was H. N. Wadsworth on Nov. 7, 1857.

Mass production of toothbrushes began in America around 1885.

One of the first electric toothbrushes to hit the American market was in 1960. It was marketed by the Squibb company under the name Broxodent.

**DENTAL SPECIALTIES**

|  |  |
| --- | --- |
| ***Active Vocabulary***  **abscess** – абсцес, нарив, гнійник  **to affect** – вражати, пошкоджувати  **appliance** – прилад  **dentition** – прорізування зубів  **bite** – прикус  **braces** – ортодонтичні скоби  **cavity** – порожнина  **demand** – вимога  **denture** – протез  **endodontics** – ендодонтія (вивчає будову і функції тканин пульпи і дентину)  **to expose** – піддавати. проникати  **filling** – пломба  **flossing** – чищення зубів зубною ниткою  **hygiene** – гігієна  **injury** – травма, пошкодження  **jaw** – щелепа  **malocclusion** – неправильний прикус  **maxillofacial** – щелепно-лицевий  **orthodontics** – ортодонтія (лікування щелепно-лицьових аномалій)  **paedodontics** - дитяча стоматологія  **palate** – піднебіння  **patient** – пацієнт  **periodontology** – парадонтологія (вивчення будови і функцій пародонту) |  |
| **to prevent** – запобігати |  |
| **prescription** – рецепт |  |
| **procedure** – процедура |  |
| **pulp –** пульпа зуба  **retarded** – відсталий (розумово) |  |
| **root canal** – кореневий канал |  |
| **to straighten** – вирівнювати, виправляти |  |
| ***I. Find the translation of the following words. Mind their pronunciation:***  ***dentist****,* ***orthodontist****,* ***surgeon****,* ***pedodontist****,* ***periodontist****,* ***prosthodontist****,* ***pathologist****,* ***hygienist****,* ***dental technician****,* ***dental assistant***  *гігієніст, хірург, ортодонт, дитячий стоматолог, помічник стоматолога, зуботехнік, пародонтолог, протезист, патолог, стоматолог*  ***II. Translate the following words and word-combinations:***  Prevention, restorative treatments, provide advice, affect oral health, fill cavities, correct bite , dental care**,** dental needs, infected teeth, oral lesions, infancy, oral healthcare, blood supply, variety, use of fluoride, measurements, nearby areas, give anesthetics, remove decay, diet choices, patient’s teeth, related structures.  ***III. Match the following English word combinations with the Ukrainian ones:***   |  |  | | --- | --- | | 1.cleft lip | a) засіб для відбілювання зубів | | 2. imaging technologies | b) структури, пов’язані з ротовою порожниною | | 3.whitening agents | c) громадськість | | 4.specific communities | d) ретинований зуб (зуб, що не прорізався і знаходиться в кістці щелепи) | | 5.related structures of the mouth | e) розщеплена губа (“заяча губа”) | | 6. impacted teeth | f) технології візуалізації | |  |

***IV. Read and translate the following text:***

**Careers in Dentistry**

Dentistry is the branch of medical science that deals with the prevention, diagnosis and treatment of the teeth, gums, jaws and other related structures of the mouth. The field of dentistry is constantly growing to meet the increasing demand for dental care and there are many opportunities in this field for dentists, dental hygienists, dental assistants, and dental laboratory technicians.

Dentists are healthcare professionals who provide preventive and restorative treatments for problems that affect the mouth and teeth. Dentists diagnose and treat problems with a patient’s teeth, gums, and related parts of the mouth. They provide advice and instruction on taking care of teeth and gums and on diet choices that affect oral health.

Dentists typically do the following:

* Remove decay from teeth and fill cavities
* Repair cracked or fractured teeth and remove teeth
* Straighten teeth to correct bite
* Place sealants or whitening agents on teeth
* Give anesthetics to keep patients from feeling pain during procedures
* Write prescriptions for antibiotics or other medications
* Examine x-rays of teeth, gums, the jaw, and nearby areas for problems
* Make models and measurements for dental appliances, such as dentures, to fit patients
* Teach patients about diet, flossing, use of fluoride, and other aspects of dental care

Most dentists are general practitioners and handle a variety of dental needs. Other dentists practice in one of nine specialty areas:

**Dental public health specialists** promote good dental health and the prevention of dental diseases in specific communities. Public health dentists work with local and state health departments to improve oral health, teach in dental schools and conduct research with preventive measures.

**Endodontists,** also called pulp specialists, perform root-canal therapy, by which they remove the nerves and blood supply from injured or infected teeth.

**Oral and maxillofacial radiologists** diagnose diseases in the head and neck through the use of imaging technologies.

**Oral and maxillofacial surgeons** operate on the mouth, jaws, teeth, gums, neck, and head, including procedures such as surgically repairing a cleft lip and palate or removing impacted teeth.

**Oral pathologists** diagnose oral diseases, such as oral cancer or oral lesions.

**Orthodontists** deals with various forms of malocclusion, and misalignment of the teeth (crowding, overlapping, overbite) and designs corrective and supportive devices in the form of dental braces, fixed and removable appliances.

**A paedodontist** **(pediatric dentists)** are specialists in the field of dentistry, which includes oral healthcare for children from infancy through the teenage years. In guiding children and teens through their dental growth and development, pediatric dentists often work closely with pediatricians, family physicians, and other dental specialists in providing comprehensive medical and dental care.

**A periodontist** diagnoses and treats the tissues supporting and surrounding the teeth, including gingivitis and periodontitis, removes calculus from teeth, provides instruction on how to maintain oral hygiene to avoid such gingival conditions.

**A prosthodontist** constructs artificial appliances designed to restore and maintain the oral function by replacing missing teeth or other oral structures with crowns, bridges, complete and partial dentures, laminate veneers, post-and-cores.

**Ex.5. Translate the following words and word-combinations into English:**

Стоматологічна допомога, давати поради та рекомендації, давати знеболювальне, вирівнювати зуби, лікування пульпи зуба, видаляти нерви, ранній дитячий вік, підлітковий вік, зубні протези, кореневий канал, щелепа, шия.

***VI. Answer the following questions:***

1. What is Dentistry?

2. What dental specialties do you know?

3. What are dentist’s duties?

4. What are orthodontists primarily concerned with?

5. How may teeth irregularities be corrected?

6. What procedures do oral surgeons perform?

7. What kind of dentist is pediatric dentist?

8. What specialist deals with the prevention and treatment of gum diseases?

9. What do dental public health specialists promote?

***VII. Complete the sentences with the words and words combinations:***

|  |
| --- |
| **extractions corrective appliances periapical abscess**  **departments missing teeth prevention of caries overbite** |

1. Various filling materials are used for treatment and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. As the patient had \_\_\_\_\_\_\_\_\_\_\_\_\_ the decision was made to extract the tooth.

3. Though the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are painless at present it is not easy for children to cope with fear.

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may be effectively replaced with crowns, bridges, complete and partial dentures.

5. The public health dentist teaches in dental schools, local and state \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may result in malocclusion and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the form of dental braces should be used.

***VIII. Translate the following sentences into English:***

1. Стоматолог виконує різні види робіт. 2. Ортодонт виправляє неправильне положення зубів. 3. Хірурги-стоматологи видаляють зуби та виконують інші хірургічні процедури у ротовій порожнині. 4. Дитячі стоматологи пломбують зуби дітей, лікують інфекції ясен, попереджають виникнення аномалій прикусу. 5. Пародонтолог – це спеціаліст, який займається профілактикою та лікуванням захворювань ясен.

**.**

**DENTAL TEAM**

***Active Vocabulary***

**to assist** – допомагати

**crowns** – коронки

**decay** – загнивання

**deposits** – відкладення

**efficiently** – ефективно

**to fabricate** – виготовляти

**impression** – відбиток, витиск

**to maintain** – підтримувати

**mold** – форма, шаблон

**sealant** – пломбувальний матеріал; пломба профілактичне покриття зубних фісур

**supplies** – припаси

***I. Read and translate the following text:***

In the British practice a dental surgeon has a degree of a Bachelor of Dental Sur­gery and his duty is to diagnose, perform, and monitor the dental care of patients.

Auxiliary personnel includes: a receptionist, a dental surgery assistant (DSA), a dental hygienist and a dental laboratory technician.

**A receptionist** is a person who creates the image of the practice. He greets and assists the patients giving information about schedule visits, filling patient’s informa­tion.

**Dental hygienist**. Dental hygienists (sometimes also known as oral health practitioners) are dental care professionals and work as part of the dental team. While dentists concentrate on treating tooth and gum conditions, the dental hygienist has a vital role in helping to prevent problems from arising. Dental hygienists carry out procedures such as scaling and polishing teeth, and applying topical fluoride and fissure sealants. The dental hygienist assesses the patient's oral tissues and overall health determining the presence or absence of disease, other abnormalities and disease risks; develops a dental hygiene diagnosis based on clinical findings; formulates treatment care plans; educates patients regarding oral hygiene and preventive oral care.

**Dental laboratory technician** is generally a highly skilled person who constructs artificial dentures, bridges and other dental appliances. Some of technicians perform all types of laboratory work, but others specialize in one aspect of constructing dentures.

**Dental assistants** greatly increase the efficiency of the dentist in the delivery of quality oral health care and are valuable members of the dental care team. The duties of a dental assistant are among the most comprehensive and varied in the dental office. The dental assistant’s responsibilities may include:

- assisting the dentist during a variety of treatment procedures

- taking and developing dental radiographs (x-rays)

- asking about the patient's medical history and taking blood pressure and pulse

- preparing and sterilizing instruments and equipment

- helping patients feel comfortable before, during and after dental treatment

- providing patients with instructions for oral care following surgery or other dental treatment procedures, such as the placement of a restoration (filling)

- teaching patients appropriate oral hygiene strategies to maintain oral health (e.g., toothbrushing, flossing and nutritional counseling)

- taking impressions of patients' teeth for study casts (models of teeth)

- performing office management tasks that often require the use of a personal computer

- communicating with patients (e.g., scheduling appointments, answering the telephone)

- helping to provide direct patient care in all dental specialties, including orthodontics, pediatric dentistry, periodontics and oral surgery

***II. Answer the following questions:***

1. Is a dental surgeon a licensed professional?

2. What specialists does an auxiliary personnel include?

3. What are duties of a receptionist?

4. What is dental surgery assistant responsible for?

5. What kind of help does a dental hygienist provide?

6. What is a dental technician’s work?

***III. Insert the missing words given below:***

A dental \_\_\_\_\_\_\_ can mix filing and impression \_\_\_\_\_\_\_\_\_; a dental \_\_\_\_\_\_\_ can make dentures, \_\_\_\_\_\_\_, gold inlays, etc. Dental hygienists are permitted to carry out the following dental work: scaling and polishing \_\_\_\_\_\_\_ , application of fluorides to teeth, dental health education. This \_\_\_\_\_\_\_ must be prescribed by a dentist and carried out under his \_\_\_\_\_\_\_\_\_\_\_. By utilizing all this \_\_\_\_\_\_\_\_\_, a dentist becomes the captain of a team which can practice in the most efficient way.

***technician, materials, assistant, teeth, treatment, supervision, assistance, crowns***

***IV. Match the terms with the definitions:***

1.symptom a. the natural chemical change that causes the slow destruction of

something

2. restoration b. a sign that a serious problem exists

3. sealant c. tests or checks that are done to make sure that people or things

are acceptable for a particular purpose

4. decay d. the return to a previous state or condition, as of health

5. screening e. a coating material capable of mechanically bonding to the

surface of a tooth

***V. Fill in the correct particle(s)/ word(s):***

*Treat smb* ***with*** *smth - treat smb* ***for*** *smth*

1. Malaria can be treated … drugs.

2. It is generally accepted that if people are depressed, they should be treated … depression.

*Cure - treat*

1. The doctors managed to … him of asthma.

2. The doctors asked the nurse to … the wound with some special cream.

*Duty- task*

1. I was given the … of cleaning the instruments.

2. We feel it's our … to help her.

*Education- training*

1. She also hopes her children will get good … .

2. On the … course we received in every aspect of the job.

***VI. Translate the following sentences into English:***

1. Існує певний перелік робіт, які дозволяють виконувати гігієністам-стоматологам. 2.Зареєстровані зубні гігієністи - це ліцензовані фахівці з гігієни порожнини рота які допомагають лікарю, ретельно чистять ваші зуби, перевіряють їх на наявність карієсу та захворювань, а також допомагають навчати вас, як підтримувати здоров'я порожнини рота. 3. Зубні техніки виготовляють протези, а протезисти займаються заміщенням втрачених зубів за допомогою штучних протезів. 4. Щоб стати техніком, потрібно в середньому від 3 до 4 років, залежно від здібностей і амбіцій людини, але для того, щоб стати досвідченим техніком, може знадобитися ще кілька років. 5. Асистенти стоматолога виконують різноманітні обов'язки по догляду за пацієнтами, в офісі та лабораторії.

**TEETH**

***Active Vocabulary***

**apex** – верхівка

**canal** – канал

**cancellous** – губчастий

**cementum** – цемент

**core** – серцевина

**crown** – коронка

**crest** – гребінь, виступ

**cushion** – амортизатор, буфер

**cusp** – горбик, виступ (про зуб)

**deciduous** – тимчасовий (про зуб)

**dentine** – дентин

**embedded** – вмурований, вставлений

**enamel** – емаль

**fiber** – волокно

**fissure** – щілина, тріщина

**foramen** – отвір

**gingiva** – ясна

**hole** – отвір

**jaw** – щелепа

**junction** – з’єднання

**layer** – шар

**ligament** – зв’язка

**to masticate** – жувати

**medulary** – мозковий

**nutrient** – поживна речовина

**pulp** – пульпа зуба

**resistant** – стійкий

**rod** – стрижень

**sheath** – оболонка

**shedding** – випадіння

**spongy** – губчастий

**sulcus** – борозна

**to tear** – рвати

**tip** – кінчик

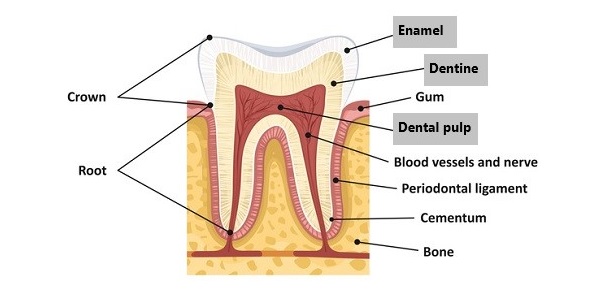
**tissue** – тканина

t**ough** – щільний, міцний, стійкий

**vessel** – судина

***I. Read and translate the following text:***

**Tooth Anatomy**



Teeth are any of the hard, resistant structures occurring on the jaws. They are used for biting and masticating food – the first step in the digestion. Teeth also help us say certain sounds.

Each tooth consists of three main parts – the crown, the neck and root. The crown is the visible part of the tooth; it is the portion that lies above the gum tissue. A protective layer called enamel covers the crown. The neck is the area of the tooth between the crown and the root. The root is the portion of the tooth that extends through the gum and into the bone of the jaw.

Every tooth consists of hard and soft tissues. The hard tissues are enamel, dentin, cementum. The soft tissue is the pulp. Enamel is the hardest material in your body and makes up the outside of your teeth, above the gum line. Dentin is the tissue that makes up the core of each tooth. Pulp is the living part of the tooth, located inside the dentin. It contains the nerve tissue and blood vessels that supply nutrients to the tooth. Cementum is located at the root of the tooth.

**Enamel** is the substance that covers the crown of the tooth. It is very hard and quite resistant to mechanical and chemical attack. The enamel is made up of microscopic enamel rods. Each enamel rod is attached to the dentin underneath it.

**Dentin** is the hard, yellow bone-like material that underlies the enamel and surrounds the entire nerve. It composes the bulk of the tooth, and is sensitive to touch and other stimuli. Dentine consists of dentinal tubules.

The dental **pulp** (the nerve of the tooth) is the soft center of the tooth. Pulp is composed of connective tissue, blood vessels, and nerves; it nourishes the dentin. A root canal is actually only a part of the dental pulp. Blood vessels and nerves enter through a hole at the tip of each root. The tip of the root is called the apex, and the hole that allows the nerve tissue, with its blood vessels to enter the tooth is called the apical foramen. The apical foramen is simply the hole in the tip of the root where the nerve and all its accompanying blood vessels must enter the tooth.

The pulp has several functions, such as:

*Sensory function* - pain from trauma to the dentin and/or pulp, differences in temperature, and pressure are caused by stimulation of the pulp.

*Formation of dentin* - the pulp is responsible for the formation of dentin. In response to trauma, the pulp forms secondary dentin, also known as reparative dentin.

*Nourishment* - the pulp contains blood vessels that help to prevent the tooth from becoming brittle by keeping it moisturized and nourished.

**Cementum** is a layer of tough, yellowish, bone-like tissue that covers the root of a tooth. It helps hold the tooth in the socket. The cementum contains the periodontal membrane. Cementum is to the root of a tooth as enamel is to the crown. Its main function is to act as an attachment layer for the periodontal ligament which is a soft tissue sheath that acts as a cushion between the bony socket and the tooth itself.

Healthy teeth are, of course, embedded in bone. The bone is covered with gums, and the gums attach not only to the bone, but also to the tooth itself.

The **gingiva** is that portion of the gums that surrounds the teeth and lies above the level of the bone. The part of the gingiva below the crest but above the attachment is called the free gingival margin. The potential space between the free gingival margin and the tooth is called the gingival sulcus.

**The periodontal Ligament** (PDL) is the soft tissue that lies between the tooth and its bony socket. It is a continuation of the connective tissue associated with the gingivo-dental fibers, and it continues around the entire tooth. In a healthy situation, there is never a direct attachment between the bone and the tooth itself. The PDL is composed of fibrous connective tissue. The bone that supports the teeth is called alveolar bone. It's only purpose in life is to support the teeth. The part of the alveolar bone that lines the socket is a thin layer of dense cortical bone called the lamina dura. The bone that underlies the lamina dura is cancellous bone (sometimes called medullary bone). Cancellous bone looks spongy and contains blood producing "organ" called bone marrow.

***II. Translate the following word-combinations into English:***

Видима частина зуба, над яснами, захисний шар, серцевина зуба, постачати поживні речовини, стійкий до механічних та хімічних пошкоджень, подразники, живити дентин, проходити через отвір, кінчик кореня, покривати корінь, утримувати зуб в ясеневій кишені.

***III. Answer the following questions:***

1. What main parts does each tooth consist of?

2. What is the crown?

3. What is enamel? What is the enamel made up of?

4. Where is the neck located?

5. What is the root?

6. What is the hardest material in your body?

7. What is located inside the dentin?

8. What does the pulp contain?

9. Where is cementum located? What is the main function of cementum?

10. What does dentine consist of?

11. What is apex?

12. What is apical foramen?

13. What are the supporting structures of the teeth?

14. What is gingiva?

15. What is the periodontal ligament?

16. What is the function of the alveolar bone?

***IV. Insert the missing words:***

1. Teeth are any of the hard, … structures occurring on the jaws. 2. Each tooth consists of three main parts – the …, the neck and …. 3. A protective layer called … covers the crown. 4. The … is the area of the tooth between the crown and the root. 5. Every tooth consists of … tissues. 6. The … is made up of microscopic enamel rods. 7.Dentin is the hard, … that underlies the enamel. 8. A … is actually only a part of the dental pulp. 9. The cementum contains the …. 10. The **…** is that portion of the gums that surrounds the teeth and lies above the level of the bone. 11. The PDL is composed of ….

***V. Match the word or word-combinations with the definition:***

1. crown a. the layer of living cells under the enamel

2. cementum b. the hardest tissue in the body that covers all of the tooth crown

3. dentin c. a soft tissue that covers the neck of the tooth

4. root canal d. a tube that moves blood throughout the body

5. nerve e. the visible part of the tooth above the gumline

6. blood vessel f. a layer of hard substance that covers the root

7. gum g. a body part that carries messages between the brain and the body

8. enamel h. a set of narrow spaces inside the root of the tooth

**VI. *Translate into English****:*

1. Кожен зуб складається з коронки, шийки та коренів. 2. Місце переходу коронки в корінь називають шийкою. 3. Емаль – найтвердіша частина людського тіла. 28 4. Цемент з’єднується з емаллю в шийці зуба. 5. Дентин дуже чутливий до болю. 6. На відміну від інших структур зуба, пульпа – пухка тканина. 7. Пульпа вміщує кров’яні судини, нерви і займає центральну частину дентину.

**TEMPORARY TEETH**

|  |  |  |
| --- | --- | --- |
| ***Active Vocabulary***  **deciduous** - непостійний, молочний (про зуб) | |  |
| **embryonic** - ембріональний, зародковий | |  |
| **eruption** - прорізування | |  |
| **dentition** -зубний ряд | |  |
| **counterpart** - зуб-антагоніст | |  |
| **resorption** - розсмоктування | |  |
| **to dissolve** - розсмоктуватися, розчинятися | |  |
| **to replace** - заміщувати (ся)  **infancy** - раннє дитинство |
| **exfoliation** - випадіння молочних зубів |
| **to appear** - з’являтися |
| **space** - простір |
| **to spread** - розповсюджуватися |
| **except for** - за винятком, окрім |
| **bud** - зачаток |
| **to maintain** - підтримувати  ***I.Insert the missing letters:***  Decidu\_us, t\_mporary, er\_ption, post\_rior, mo\_ar, dent\_tion, shed\_ing, a\_e, mand\_bular, maxil\_ary.  ***II. Read and translate the following words and word-combinations:***  Milk teeth, temporary, development, to erupt, embryo phase, midline, to spread, posterior region, permanent counterpart, except for, to remain until, root resorption, tooth bud, in order to, proper development, dental researchers.  **Ex.3. Read and translate the following text:**  Primary Dentition | News | Dentagama  Deciduous teeth, otherwise known as milk teeth, baby teeth, temporary teeth, primary teeth are the first set of teeth in the growth development of humans and many other mammals. They develop during the embryonic stage of development and erupt during infancy. They are usually lost and replaced by permanent teeth.  Deciduous teeth start to form during the embryo phase of pregnancy. The development of deciduous teeth starts at the sixth week of development. This process starts at the midline and then spreads back into the posterior region. The eruption of these teeth begins at the age of six months and continues until twenty-five to thirty-three months of age. The first teeth seen in the mouth are the mandibular centrals and the last are the maxillary second molars.   |  |  | | --- | --- | | The deciduous dentition is made up of central incisors, lateral incisors, canines, first molars, and secondary molars. All of these are replaced with a permanent counterpart except for the first and second molars; they are replaced by premolars. The deciduous teeth will remain until the age of six. At that time, the permanent teeth start to appear in the mouth. The eruption of permanent teeth causes root resorption, where the permanent teeth push down on the roots of the deciduous teeth causing the roots to be dissolved and become absorbed by the forming permanent teeth. The process of shedding deciduous teeth and the replacement by permanent teeth is called exfoliation. This may last from age six to age twelve. By age twelve there usually are only permanent teeth remaining. *Teething age of deciduous teeth:*  Central incisors : 6-12 months  Lateral incisors : 9-16 months  Canine teeth : 16-23 months  First molars : 13-19 months  Second molars : 22-33 months  Deciduous teeth are considered essential in the development of the oral cavity by dental researchers and dentists. The permanent teeth develop from the same tooth bud as the deciduous teeth. Also the muscles of the jaw and the formation of the jaw bones depend on the primary teeth in order to maintain the proper space for permanent teeth. The roots of deciduous teeth provide an opening for the permanent teeth to erupt. These teeth are also needed for proper development of a child's speaking and chewing of food.  ***IV. Translate the following words and word-combinations:***  Тимчасові зуби, молочні зуби, постійні зуби, перший набір зубів, центральний різець, латеральний різець, ікло, замінюватися постійними зубами, починатися з середньої лінії, прорізування зубів, залишатися до шести років, призводити до розсмоктування коренів, формування постійних зубів, випадіння молочних зубів, м’язи щелепи, залежати від, бути необхідним для правильного розвитку.  ***V. Answer the questions:***  1. What are deciduous teeth?  2. What synonyms for “deciduous teeth” can you name?  3. When do the baby teeth develop?  4. When do deciduous teeth start to form?  5. When does the development of deciduous teeth start?  6. When does the eruption of temporary teeth begin?  7. What are the first teeth seen in the mouth?  8. What is the deciduous dentition made up?  9. What does the eruption of permanent teeth cause?  10. What is exfoliation?  ***VI. Fill in the gaps with the correct word or word-combination from the word bank:***   |  | | --- | | ***canines incisors molars premolars wisdom teeth baby teeth***  1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the last teeth to grow in. They usually serve no specific function.  2. The front \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are usually the first teeth to appear and the first to be lost by children.  3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are very pointly compared to other kinds of teeth. They are the best to tear meat.  4. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are located between the canines and molars; they are usually smaller than the molars; they contain ridges.  5. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are shed when their roots are resorbed as the permanent teeth push toward the mouth cavity in the course of their growth.  6. Food is pushed back to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so that it can be ground up completely. |   ***VII. Read the following text and entitle it:***  At birth, baby’s 20 primary teeth are present in the baby's jawbones and the crowns of these primary teeth are almost complete. Usually, the front four teeth will begin to "erupt" between age 6 months and one year. By age three, most children have a full set of 20 primary teeth. The primary teeth play an important role in the child's ability to chew and speak and in the child's appearance. Also, the primary teeth are useful in holding space in the jaws for the permanent teeth.  As a child approaches age six, the jaw is growing to make room for the permanent teeth. As this happens, the roots of the permanent teeth are beginning to be absorbed by the surrounding tissue and the permanent teeth prepare to erupt.  Between ages five and six, the first permanent molars usually erupt. These molars are also called, "six-year" molars.  These molars do not replace any primary teeth and are especially important because they help determine the lower part of a child's face and affect the position of the other permanent teeth. By age 21, all 32 permanent teeth usually will have erupted. | |
|  |

**PERMANETN TEETH**

***Active Vocabulary***

|  |
| --- |
| **permanent** – постійний |
| **dentition** – зубний ряд |
| **to complete** – завершувати (-ся) |
| **to refer** – стосуватися |
| **entrance** – вхід |
| **maturity** – зрілість  **attainment** – знання, досвід |
| **removal** – видалення |
| **impaction** – защемлення, ретенція |
| **soreness** – болючість, чутливість |
| **to experience** – відчувати |
| **pain** – біль |
| **evident** – очевидний |
| **substantial** – суттєвий |
| **damage** – пошкодження |
| **adjacent** – суміжний, прилягяючий |
| **crowding** – скупчення |
| **complaint** – скарга |
| **ache** – біль |
| **to accumulate** – накопичувати(-ся)  ***I. Read and translate the following text:***  Permanent teeth are the second set of teeth formed in humans. There are thirty-two permanent teeth, consisting of six maxillary and six mandibular molars, four maxillary and four mandibular premolars, two maxillary and two mandibular canines, four maxillary and four mandibular incisors.  The first permanent tooth usually appears in the mouth at around six years of age. The first adult teeth are the permanent first molars that come through the gums at the back, right behind the last 'milk' molars. These first permanent molars are the most important teeth for the correct development of an adult dentition. Up to the age of thirteen years twenty-eight of the thirty-two permanent teeth will appear. Grown-ups have a set of 32 permanent teeth, of four different teeth types. Sixteen at the top and sixteen at the bottom jaw: 8 incisors, 4 canines, 8 premolars and 12 molars.  The full permanent dentition is completed much later. The four last adult teeth, one at the back of every arch will appear between the ages of seventeen and twenty-one years. This is the reason they are named wisdom teeth. Wisdom teeth, officially referred to as third molars, are usually the last teeth to develop. They are located in the very back of your mouth, next to your second (or twelve year) molars and near the entrance to your throat. Third molars are usually completely developed between the ages of 15 and 18, a time traditionally associated with the onset of maturity and the attainment of "wisdom."  In many people, wisdom teeth come in with no problems. If the teeth are healthy and they come in straight, then most of people do not even realize the teeth are there. Unfortunately, in some cases, they cause problems that require the wisdom teeth removal (extraction) by the dentist.  Problem caused by wisdom teeth does not necessarily mean pain. Most people do not experience pain with their wisdom teeth. Problems are more often silent and progress slowly. By the time a problem does become evident to a person, substantial damage has often already occurred. Specific problems include pain, bacteria, impactions, damage to adjacent root, crowding, pericoronitis (inflammation around the crown of a tooth) and others.  Pain is the most common complaint associated with impacted wisdom teeth. A person may have soreness or pain in the back part of the jaw, ear ache, sore throat or pain in the side of the face. The impacted wisdom tooth itself may be the source of the pain or there may be an infection associated it. This generally happens because these partly erupted teeth are difficult to keep clean, and the accumulated food particles cause the gums around the tooth to get infected. If untreated by removing the wisdom tooth, the infection may cause destruction of the bone surrounding the wisdom tooth and will affect the neighboring tooth.  ***II. Insert the missing words:***  1. There are … permanent teeth. 2. The first permanent tooth usually appears in the mouth at around … of age. 3. Grown-ups have a set of … permanent teeth, of four different teeth types. 4. Wisdom teeth, officially referred to as …, are usually the last teeth to develop. 5. In many people, … come in with no problems. 6. Most people do not experience … with their wisdom teeth. 7. Specific problems include pain, …, impactions, …, crowding, pericoronitis. 8. The … wisdom tooth itself may be the source of the pain or there may be an infection associated it.  ***III. Are these statements true or false?***  1. Permanent teeth are the first set of teeth formed in humans. 2. The first adult teeth are the permanent first molars. 3. Grown-ups have a set of 32 permanent teeth, of six different teeth types. 4. Third molars are usually completely developed between the ages of 15 and 18. 5. In many people, wisdom teeth come in with problems. 6. In some cases, they cause problems that require the wisdom teeth removal. 7. Pain is the most common complaint associated with impacted wisdom teeth.  **IV. Complete the text with the words:**  ***permanent; eruption; pain; infections; baby; erupt; early; chew; to complaint.***  Your child’s \_\_\_\_\_\_\_ teeth are extremely important. Without them your child cannot \_\_\_\_\_\_ food properly and will have difficulty learning to speak clearly. A deep cavity in a baby tooth can cause a lot of \_\_\_\_\_\_ that a young child may not be able \_\_\_\_\_\_\_\_\_\_\_\_\_about to the parent properly. Severe \_\_\_\_\_\_\_\_\_\_\_\_\_ may result from untreated cavities. Untreated cavities in primary teeth can also adversely affect the development of \_\_\_\_\_\_\_\_\_\_\_\_ teeth. Such cavities result in a roughening of adult teeth, or cause permanent teeth that \_\_\_\_\_\_\_\_\_\_\_ with cavities. Baby teeth also serve to reserve space for permanent teeth and guide new tooth \_\_\_\_\_\_\_\_\_\_\_\_in a proper direction. If a baby tooth is lost too \_\_\_\_\_\_\_\_\_\_\_, new teeth may grow in crooked.  ***V. Insert prepositions where necessary (for, around, of, on, into, in, without):***  Wisdom teeth commonly do not have enough room to properly erupt \_\_\_\_\_\_\_\_ our mouth where they can become fully functional and cleansable teeth. This lack \_\_\_\_\_\_ space can result in a number of harmful effects \_\_\_\_\_\_\_ your overall dental health. When a tooth cannot erupt into proper alignment, we call it impacted, which simply means “stuck” \_\_\_\_\_\_ an improper position. If you do not have enough room in your mouth \_\_\_\_\_\_ your wisdom teeth to erupt into proper position they can cause a multitude of problems, such as: infection, damage to adjacent teeth, cysts, crowding etc.  \_\_\_\_\_\_\_\_\_ enough room for total eruption, the gum tissue \_\_\_\_\_\_\_ the wisdom tooth can become irritated and inflamed, resulting in recurrent pain, swelling and problems with chewing and swallowing.  1,700+ Permanent Teeth Stock Photos, Pictures & Royalty-Free Images -  iStock | Teeth chart, Tooth |
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**JAWS**

**Active Vocabulary**

**antrum**– пазуха, порожнина (зокрема всередині кістки)

**coronoid** – вінцевий

**foramen** – отвір

**hard palate** – тверде піднебіння

**incisive** – різцевий; що стосується різців

**inferior** – нижній

**jaw** – щелепа

**masseter** – жувальний

**mandible** – нижня щелепа

**mastication** – жування

**maxilla** – верхня щелепа

**mental** - підборідний

**nasal** – носовий

**nasal spine** – носовий гребінь

**palate** – піднебіння

**process** – відросток

**ramus** – гілка

**soft palate**– м’яке піднебіння

***I. Read and translate the following text:***

The lower jaw has its own separate bone which is called 'the mandible', which is U-shaped and stretches from one ear, down to the chin area and then back up again to the other ear. It is joined to the upper part of the head around the ear region by two jaw joints (called 'temperomandibular joints'). If your rest your fingers on the skin just in front of your ears, and then open and close your mouth, you can feel the jaw joints moving. The mandible has names for its different parts, as follows:

The **body of the mandible** is the middle section of the U-shape which supports the lower teeth. The **condyle** is the rounded end of bone that fits into the movable joint between the mandible and the cranium (the part of the skull which encloses the brain). There is one on each side of the mandible. The **coronoid** process is the name for a triangular projection from the mandible which joins one of the chewing muscles to the cranium. There is one on each side of the mandible. The ascending **ramus** is the flatter, straighter part on the sides of the lower jaw which joins the body of the mandible to the coronoid processes and the condyles.

The maxilla is a name for the upper jaw, and it is made up of several bones stuck (or fused) together, and sits in front of and just below the cranium. It is attached to the cranium and forms the cheeks, the nose, and the roof of the mouth.

The maxillary **antrum** or sinus is the name for the air filled space that sits just under the cheekbone, and just above the roof of the mouth. There is one on each side of the face, either side of the nose. The anterior **nasal spine** is a bit of bone which protrudes from the maxilla at the lower end of the nose. The **zygomatic process** is a curved piece of bone which extends outwards from the maxilla and forms part of the cheekbone. The **palate** is the roof of the mouth, it separates the nose and the mouth: the hard part is called the 'hard palate' and is towards the front of the mouth, and the softer part at the back near the throat is the soft palate.

The temperomandibular joint (TMJ) is the movable joint between the mandible (lower jaw bone) and part of the cranium called the temporal bone. It is a complicated joint and the two hard bone surfaces are separated by a circular piece of softer cartilage which acts like a cushion. The lower jaw moves up and down, sideways and forwards. This joint is in constant use during chewing, swallowing, talking, and laughing. Some of these movements involve rotation of the joint and some are sliding movements.

A foramen is an opening or hole which lets nerves and blood vessels pass through bone. The plural of foramen is foramina. The **mental foramen** is on the body of the mandible. Nerves and blood vessels which travel to the lower lip pass through this. The **mandibular** or inferior dental foramen is on the ascending ramus. A nerve called the inferior dental nerve and blood vessels which go to the lower teeth pass through this. The **incisive** foramen is at the front of the palate (the roof of the mouth). Nerves called incisive nerves and the blood vessels which supply the front of the palate pass through this.



***II. Answer the questions:***

1. How can you call the upper and the lower jaw?

2. What is the condyle?

3. What is known as antrum?

4. What is the zygomatic process?

6. What palates do you know?

7. When do we use the temporo-mandibular joint?

8. What is a foramen?

***III. Translate into Ukrainian:***

to be fixed to the skull, to form the roof of the mouth, to lie, to be perforated, to be shaped, to be attached, return backwards, to be similar, rotary movements, cutting edges, to grasp the food, chewing, to swing from side to side, muscles of mastication, a pair of scissors.

***IV. Insert the missing words:***

1. The body of the … is the middle section of the U-shape which supports the lower teeth. 2. The … is the name for a triangular projection from the mandible which joins one of the … … to the cranium. 3. The maxillary … or sinus is the name for the air filled space that sits just under the …, and just above the roof of the mouth. 4. The … joint is the movable joint between the mandible and part of the cranium called the … bone. 5. The … is on the body of the mandible. 6. The **…** is at the front of the palate.

***V. Insert prepositions where necessary:***

**Soft Tissues**

The skin …the mouth, i.e. the red tissue covering the cheeks, floor … the mouth, palate and tongue etc, is called *mucous membrane.* It contains many tiny glands which contribute … the lubricating and cleansing functions … saliva. The space between the teeth and the mucous membrane lining the cheeks and lips is called the *buccal sulcus*.

The soft palate is a flap … soft tissue attached … the back … the hard palate. Its function is to seal off the oral cavity … the nasal cavity during swallowing, … order to prevent food passing up … the nose.

***VI. Insert articles or possessive pronouns where necessary****:*

**The Tongue**

The floor of … mouth lies within the arch of the mandible and is occupied by … tongue. The tongue is attached to … floor of … mouth by a thin fold of mucous membrane called the *lingual frenum*. The upper lip is attached to … gum above the central incisors by a similar frenum.

The functions of … tongue are swallowing, speech, taste and cleansing … mouth. It is a mobile muscular organ covered by a thick layer of mucous membrane on top and a thinner layer below. The thick upper layer is studded with minute projections which give it a rough surface. This helps … cleansing action of the tongue.

Situated in these minute projections are *taste buds* which allow us to distinguish … sweet, sour, salt and bitter flavours. The swallowing, speech and cleansing functions are brought about by … muscular activity of … tongue. Swallowing is a complex muscular act, which prevents food entering … nasal cavity or larynx instead of the esophagus.

***VII. Translate into English:***

1. Верхня щелепа нерухома. 2. Тверде піднебіння відділяє рот від носа. 3. Дно гайморової пазухи знаходиться над коренями молярів. 4. Верхня щелепа має вигляд підкови. 5. Місце з’єднання тіла/основи та гілки називається кутом нижньої щелепи. 6. М’язи, що відкривають рот, прикріплені до тіла/основи нижньої щелепи. 7. Жування здійснюється обертовими рухами нижньої щелепи. 8. Їжа перемелюється на дрібні шматочки, які можна ковтати. 9. Всі рухи щелеп здійснюються жувальними м’язами.

**GUMS**

***Active Vocabulary***

**adjacent** – прилеглий

**attached** – прикріплений

**to demarcate** – розмежовувати

**gingival groove** – ясенна борозна

**interdental** – міжзубний

**marginal** – маргінальний, крайній

**notch** – виїмка

**resilient** – витривалий

**scallop shape** – форма гребінця

**seal** – ущільнення

**stippling** – прожилки

**sulcus** – борозна

**translucent** – напівпрозорий

**width** – ширина

***I. Read and translate the text:***

The gums, or gingivae, are made up of the soft, mucosal tissue that lies over the upper and lower jaws inside the mouth. They surround the teeth of the upper and lower jaws and provide a protective seal for the teeth.

The gums are securely bound to the bone that lies beneath them, helping them remain resilient against the friction of drinking and eating, unlike the other soft tissues that line the mouth inside the lips and cheeks. When they are healthy, the gums help protect the tissues that are deeper in the mouth. One of the first indications of ill health of the gums is often a change in color. In lighter-skinned people, the gums are usually a light pink color, and they may be darker in people with more melanin pigmentation; therefore, the color of unhealthy gums is measured in relation to their individual ideal color. Inflammation is also indicated by swelling and increased predisposition to bleeding and is often due to the accumulation of dental bacteria. The health of the gums can both reflect and affect a person’s overall health. When gum tissue is unhealthy, it can allow disease to enter the deeper tissues of the mouth, which can lead to the loss of the teeth over the long term.

The gums are categorized into three anatomical categories: marginal, attached, and interdental.

Attached Gingiva:  Gingival tissue laying between the alveolar gingiva and the mobile gingiva.  The tissue is roughly four to five millimeters wide, depending on location, and tightly affixed to the underlying periosteum of alveolar bone.  Stippling is present to varying degrees and when dry, the tissue is immobile, firm, and dull.

Marginal Gingiva:  A strip of gingival tissue surrounding the neck of each tooth.  For roughly half of individuals, the marginal gum is demarcated from the adjacent, attached gums by a shallow linear depression known as the free gingival groove.  Depth of the outer groove varies based on the oral cavity area and is very prominent on mandibular anteriors and premolars.

When measured from the free gingival crest to the attached gingiva, width of the marginal gum ranges from 0.5 to 2.0 mm.  While the clinical appearance, such as dullness, firmness, and pinkness, of the marginal gingiva are similar to those of the attached gingiva, it has a more translucent appearance.  Stippling is not present and because the soft tissue is moveable, a probe can be inserted up to three millimeters into the sulcus formed between the mucosa and the tooth when performed in a healthy mouth.

Interdental Areas:  Area of gum laying between the teeth, the interdental gums occupy the interproximal space beneath the area of tooth contact known as the gingival embrasure.  They are covered in keratin and resistant to the force of chewing.

Discolored gums may indicate inflammation or pathology. Smoking and the use of drugs may also cause discoloration of the gums. Variations in the color healthy gums may also appear, depending on the thickness of the tissue, the amount of blood that flows to the tissue, certain medications, and natural variations in pigmentation. In addition to color, gum pathologies can be indicated by the shape of the tissue in relation to the teeth; the texture of the gums; and their reaction to irritation, such as during brushing or dental probing. An overgrowth of bacterial plaque in the mouth, due to inadequate oral hygiene, is one of the primary causes of gum disease and also one of the most easily remedied with regular, proper oral care.

***II. Answer the following questions:***

1. What are the gums made up of?

2. What are the first indications of ill health in the gums?

3. Haw can gums be categorized?

4. What is Attached Gingiva?

5. What is Marginal Gingiva?

6. What is Interdental Areas?

7. What may discoloured gums indicate?

8. What are the indicators of gum pathologies?

***III. Insert the missing words:***

1. The gums are made up of the soft, … tissue that lies over the upper and lower jaws. 2. The gums are securely … to the bone that lies beneath them. 3. One of the first indications of ill health of the gums is often a …. 4. Inflammation is also indicated by … and increased predisposition to … . 5. The gums are categorized into … anatomical categories. 6. The tissue is … four to five millimeters wide, depending on location. 7. A strip of gingival tissue surrounding … of each tooth. 8. Smoking and the use of drugs may also cause … of the gums. 9. An overgrowth of bacterial … in the mouth, due to inadequate oral hygiene, is one of the primary causes of … .

***IV. Complete the following sentences with the words given below:***

The gingiva consists of free and ... tissue. The attached gingiva is the portion of the gingiva that is firm, … , stippled, and tightly … to the underlying periodontium, tooth, and bone. The free gingival margin is defined as the … border of the free gingiva that … the tooth and is not directly attached to the … surface. The free gingival … generally corresponds to the base of the gingival … . It is present in 30–40% of adults and most frequently occurs in the … premolar and incisor regions. The mucogingival junction (MGJ) represents the … between the gingiva (keratinized) and … mucosa (non‐keratinized).

*alveolar margin mandibular coronal sulcus junction bound tooth attached surrounds dense*

***V. Read the following text, put 7-8 questions to it:***

### Characteristics Of Healthy Gums

Healthy gums are usually pink in color and commonly described as a coral pink. Other colors such as red, white and blue can be signs of inflammation caused by gingivitis. Smoking tobacco or the use of drugs can also result in discoloration as. While healthy gums are described as a coral pink, there is often variation in color from patient to patient. This can be due to various factors including: the thickness and degree of keratinization of the epithelium, amount of blood flow to the gums, the skin’s natural pigmentation, underlying disease and medications.

Because the color of healthy gums can vary, a uniform color is more important than the specific underlying color. Excess deposits of melanin can also cause dark spots or patches on the gums. These dark spots can be especially prevalent at the base of the interdental papillae. Gum depigmentation or gum bleaching is a procedure which is commonly used in cosmetic dentistry to remove these dark spots.

Healthy gums also have a smooth curved or scalloped appearance. In addition, healthy gums fill and fit each space between the teeth. Full gums are different from swollen gum papilla, which is commonly seen in gingivitis or the empty interdental embrasure, which is often seen in periodontal disease. Healthy gums securely hold to each tooth and the gum surface narrows and becomes thin at the free gingival margin. In contrast, inflamed gums have are puffy appearance.

**ORAL HYGIENE**

***Active Vocabulary***

**aid** – допоміжний засіб, пристрій, прилад

**avoid** – уникати, ухилятися

**bristle** – щетинка

**cancer** – рак

**canker** – виразка на слизовій ротової порожнини; афта

**check-up** – огляд, перевірка

**cold sore** – герпетичне висипання на слизовій ротової порожнини

**deposit** – відкладення

**emergency** – невідкладна допомога, критичний стан, крайня необхідність

**firm** – твердий

**floss** – зубна нитка

**fluoride** - флор

**gums** – ясна

**hygiene** – гігієна

**to maintain** – підтримувати, дотримуватись

**plaque** – бляшка, пляма, наліт

**raw** – сирий

**remnants, debris** – залишки

**to rinse** – полоскати, засіб для ополіскування

**stagnation** – застій (їжі), стагнація

**to stick** – приклеюватися, прилипати

**substitute** – замінник

**supplement** - добавка

**thrush** – кандидозний стоматит

***I. Read and translate the text:***

Good dental or oral care maintains not only healthy teeth, gums and tongue, but also the whole body. Oral problems, including bad breath, dry mouth, canker or cold sores, tooth decay, or thrush are all preventable with proper care.

Most dental disorders arise directly and indirectly from two basic diseases of teeth and their supporting tissues – caries and periodontal disease. Prevention of dental disease therefore entails elimination of food stagnation, as this is the primary cause of caries and periodontal disease. Food stagnation causes plaque formation; which in turn leads to acid production, in the case of caries; and to bacterial irritation and calculus in periodontal disease. The methods of prevention are oral hygiene.

It includes brushing the teeth, flossing, cleaning the tongue, and visiting the dentist regularly. Maintaining good oral hygiene is one of the most important things you can do for your teeth and gums. Healthy teeth not only enable you to look and feel good, they make it possible to eat and speak properly. Good oral health is important to your overall well-being. It is recommended that you see your dentist and dental hygienist at least twice a year however the dental care that you provide on your own in-house is an integral part of maintaining good oral health. A good in-house regimen supplemented by regular dentist check-ups and cleanings is the best way to prevent dental emergencies.

Brushing with fluoride toothpaste is recommended at least twice a day to remove plaque and the remnants of food and drink from our teeth and gums. Flossing once a day is an essential practice to avoid gum disease and preventing tooth decay. An oral rinse also helps promote good oral hygiene as it will reduce oral discomfort, provide moisture to oral tissues and help with bad breath.

Good oral hygiene helps to prevent dental problems - mainly plaque and calculus which are the main causes of gum disease and caries (tooth decay). Dental plaque is a soft whitish deposit that forms on the surface of teeth. It forms when bacteria combine with food and saliva. Plaque contains many types of bacteria. You can remove plaque by good oral hygiene. Calculus, sometimes called tartar, is hardened calcified plaque. It sticks firmly to teeth. Generally, it can only be removed with special instruments by a dentist or dental hygienist.

Practicing the oral hygiene habits are great ways to maintain proper oral health however good habits alone will not remove all the plaque that builds up over time. This is why it is necessary to see your dentist and dental hygienist regularly to remove the plaque to lower your risk of toothaches, cavities, periodontal disease or even the loss of all your teeth. By removing plaque you reduce your chances of needing root canals, tooth extractions, dental bridges, crowns and more. Your dentist and dental hygienist will ensure that you will receive the necessary treatment to maintain good oral health of your teeth, mouth and gums and keep you smiling.

Good oral hygiene results in a mouth that looks and smells healthy. This means:

* your teeth are clean and free of debris;
* gums are pink and do not hurt or bleed when you brush or floss;
* bad breath is not a constant problem.

***II. Translate the following words and word-combinations into English:***

Карієс, зубний камінь, мікробна бляшка, невід’ємна частина, запобігти, видалення зубів, регулярний огляд, залишки їжі, поверхня зубів, раз на день, двічі на день, чищення зубів за допомогою зубної нитки, зменшити дискомфорт, неприємний запах з рота, звичка, ясна, втрата всіх зубів, отримати необхідне лікування, зубний біль.

***III. Answer the following questions:***

1. What does dental hygiene include?

2. How often is it recommended to see the dentist and dental hygienist?

3. What is the best way to prevent dental emergencies?

4. What is the purpose of brushing with fluoride toothpaste?

5. Why is flossing recommended?

6. What is the benefit of oral rinse?

7. What dental problems can good oral hygiene help to prevent?

***IV. Complete the following sentences with the words given below:***

***brushing, stick, diseases, prevents, oral, plaque, gum, treat***

The practice of \_\_\_\_\_ hygiene is important because it \_\_\_\_\_\_\_\_ the build up of dental \_\_\_\_\_\_. Plaque causes the two most common \_\_\_\_\_\_\_\_ found in the mouth, dental decay and \_\_\_\_ disease. The longer dental plaque is permitted to \_\_\_\_\_ to the teeth, the greater is the risk of dental disease. To prevent and \_\_\_\_\_ these diseases, dental plaque must be removed every day, by thorough \_\_\_\_\_\_\_\_\_ and flossing.

***V. Read the following abstract and translate it:***

Some common dental problems related to poor oral hygiene include caries (tooth decay), gum diseases, tooth erosion. Caries is when holes form in parts of the enamel of a tooth. A main cause of caries is due to a build-up of plaque. If you have tooth decay you may need fillings, crowns or inlays. Gum disease means infection or inflammation of the tissues that surround the teeth. Most cases of gum disease are plaque-related. Plaque contains many different types of bacteria and a build-up of some types of bacteria is associated with developing gum disease. Tooth erosion is a common problem. It is the gradual erosion of tooth enamel by the action of acid on the teeth. This is different to damage caused by bacteria resulting in tooth decay and caries. Tooth erosion affects the entire surface of the tooth.

***VI. Make up the sentences using the following words and word-combinations:***

1. day /teeth/ your/ fluoride/ every/ with/ a/ Brush/ toothpaste.

2. Clean/ day/ floss/ between/ teeth/ every/ with/ your.

3. Tobacco/chew/ Don't/ or/ smoke.

4. your/ health/ dentist/ regularly/ See/ or/ oral/ professional.

5. Fluoride/ a/ Rinse / daily/ mouthwash/ with.

***VII. Translate into English****:*

1. Будь-яка профілактика включає комплекс заходів, що запобігають виникненню несприятливих факторів, що спричинюють захворювання. 2. Стоматологічні захворювання виникають в результаті дії етіологічних факторів. 3. Гігієна ротової порожнини є складовою частиною запобігання всіх стоматологічних захворювань. 4. Профілактика карієсу можу бути здійснена комплексом заходів, спрямованих на усунення карієсогенної ситуації в порожнині рота та на підвищення резистентності тканин зуба. 5. Важливе значення в профілактиці захворювань пародонта має своєчасне та ретельне видалення зубних відкладень.

**TOOTHBRUSHING**

***Active Vocabulary***

**adult tooth loss** – втрата зубів у дорослих

**ancient** – стародавній

**boar hair** – шерсть кабана

**bristles** – щетинки зубної щітки

**calcification** – закам’яніння, кальцифікація

**chewing surfaces** – жувальні поверхні

**crude** – сирий, грубий, неотесаний

**interdental cleaning** – міжзубне чищення

**life expectancy** – тривалість життя

**saliva minerals** – мінерали слини

**tartar, calculus** – зубний камінь

**to harden** – тверднути

**to prevent (from)** – запобігати

**to shorten** – скорочувати

**twigs and leaves** – гілочки та листочки

***I. Read and translate the text:***

As long ago as 3000 B.C., the ancient Egyptians constructed crude toothbrushes from twigs and leaves to clean their teeth. Similarly, other cultures such as the Greeks, Romans, Arabs and Indians cleaned their teeth with twigs.

The modern toothbrush was developed in England in 1780. While languishing in jail, William Addis decided to drill holes into a sheep’s tibia, and pulled through the bristles of boar hair. While he was credited with the discovery of modern toothbrush, a similar design has since been discovered in China from 1400. In the United States, although toothbrushes were available at the end of the 19th century, the practice did not become widespread until after the Second World War, when U.S. soldiers continued the toothbrushing that had been required during their military service.

Toothbrushing is the act of scrubbing teeth with a toothbrush equipped with toothpaste. Since only 2/3 (two thirds) of the outer tooth can be reached by a toothbrush, interdental cleaning (with floss or an interdental brush) can usefully accompany toothbrushing. Together, these two activities are the primary means of cleaning teeth, one of the main aspects of oral hygiene.

Brush your teeth at least twice a day. Use a soft-tufted brush and a toothpaste that contains fluoride. The head of the brush should be small enough to get into all the areas of the mouth. Spend at least two minutes brushing, covering all areas (the inside, outside, and biting areas of each tooth). Pay particular attention to where the teeth meet the gum. Get a new toothbrush every 3-4 months.

Ideally, brush your teeth either just before eating, or at least an hour after eating. The reason for this is to help prevent tooth erosion. Many foods contain acids. After your teeth are exposed to acid, the enamel is a little softened. But, the action of calcium and other mineral salts in the saliva can help to counteract and reverse this softening. Therefore, do not brush teeth immediately after eating when the enamel tends to be at its softest. In particular, after eating or drinking acid foods and drinks. It is best to wait at least an hour after eating or drinking anything before brushing.

Clean between your teeth after brushing once a day, but ideally twice a day. This is to remove plaque from between teeth. Dental floss is commonly used to do this. However, some studies suggest that small interdental brushes may do a better job than floss. The aim is to clean the sides of the teeth where a toothbrush cannot get to, and clear the spaces between teeth (the interdental spaces) of debris. The gums may bleed a little when you first begin to clean between your teeth. This should settle in a few days. If it persists then see a dentist, as regular bleeding may indicate gum disease.

Many people also use an antiseptic mouthwash each day to help prevent gum disease. In particular, for those who are unable to use a toothbrush, regular rinsing with an antiseptic mouthwash will help to clean the teeth. Many people also clean their tongue after cleaning their teeth. You can do this with a toothbrush. You can also buy a special plastic tongue scraper from pharmacies. If you smoke, you should aim to stop smoking. Smoking is a major risk factor for developing gum disease. If children need medicines, wherever possible use sugar-free medicines.

The proper brushing technique is to: place your toothbrush at a 45-degree angle to the gums; gently move the brush back and front in short (tooth-wide) strokes; brush the outer surfaces, the inner surfaces, and the chewing surfaces of the teeth; to clean the inside surfaces of the front teeth, tilt the brush vertically and make several up-and-down strokes.

There are four brushing methods that dental professionals encourage their pa­tients to use, each addressing different oral health concerns. They’re unlike the con­ventional ‘scrubbing’, also known as side-to-side method that most patients use which is damaging to their tooth and gum structure. Instead of harming, these professional brushing methods actually help to promote the health of the teeth and gums:

**Stillman’s Brushing Method.** Indications for use: for patients with gingivitis; to remove plaque from *above* the gum line.

Method/Technique: the bristles are held at a 45° angle toward the gum line. Half of the bristles should be covering the gums, and the other half of the bristles should be on the tooth surface. By making short and light horizontal movements, the plaque is removed from above the gum line. These motions help to remove plaque and stim­ulate the gums. Only small groups of teeth can be done at a time. Once an area is complete, move onto the next set of teeth.

**Bass (Sulcular) Brushing Method.** Indications for use: for patients with periodontitis; to remove plaque from *below* the gum line.

Method/Technique: like Stillman’s, the bristles are held at a 45° angle toward the gum line. Very slight pressure and vibratory motions are made so that the bristles go slightly beneath the gum line. Only small groups of teeth can be done at a time. Once an area is complete, move onto the next set of teeth.

Both Stillman’s and Bass brushing methods can be ‘modified’ by gently sweeping the bristles away from the gums after performing the instructed brushing method.

**Charter’s Brushing Method.** Indications for use: for patients with orthodontic braces.

Method/Technique: with the bristles positioned at a 45° angle, direct them so that they remove plaque from above the brackets and arch wire, then direct them so that the bristles remove plaque from below the brackets and arch wire. This will ensure that plaque is removed from all surfaces of the braces.

**Circular (Roll) Brushing Method.** Indications for use: for young patients; patients with poor manual dexterity; in combination with any other brushing method; for healthy patients instead of “scrub­bing” method.

Method/Technique: the bristles are held at a 45° angle toward the gum line. Make small and light circular shaped brush strokes overlapping each tooth surface until all surfaces are reached.

For all of these brushing methods, continue to brush the chewing surfaces, as well as the back of the bottom and front teeth, and the tongue by lightly scrubbing up and down, being careful not to damage any of the tissues. Also, remember to brush using a soft bristled toothbrush!

***II. Answer the questions:***

1. What do you know about the first toothbrush?

2. Who developed the modern toothbrush?

3. What is toothbrushing?

4. What kind of brush should you use?

5. When should you brush your teeth?

6. What is dental floss?

7. When can brushing be effective?

8. What is the proper brushing technique?

***III. Read the sentences pairs. Choose which word best fits each blank:***

*1. apply / remove*

a. The hygienist uses this instrument to \_\_\_\_\_\_\_\_plaque from between the teeth.

b. Kate used a microbrush to \_\_\_\_\_\_\_\_\_\_\_the fluoride paste.

*2. polish/ clean*

a. The hygienist will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Jan’s teeth so they are shiny.

b. The dentist uses various instruments to \_\_\_\_\_\_\_\_\_\_\_\_ your teeth.

*3. rinse / floss*

a. You have to be careful using \_\_\_\_\_\_\_\_\_\_\_ as it may damage your gums.

b. After every meal, it’s necessary to \_\_\_\_\_\_\_\_\_\_\_ the mouth.

*4. remain / bleed*

a. You can brush and floss your teeth until your gums \_\_\_\_\_\_\_\_\_\_,

b. but plaque constantly forming on your teeth can still \_\_\_\_\_\_\_\_\_.

*5. dissolves / hardens*

a. Plaque combines with sugars to create acid which \_\_\_\_\_\_\_\_\_the enamel and causes tooth decay.

b. If plaque is not removed during 48 hours, it \_\_\_\_\_\_\_\_\_\_\_\_ and results in calculus or tartar.

*6. healed / filled*

a. Early demineralization of the tooth can be \_\_\_\_\_\_\_\_\_\_\_\_ by taking the preventive measures,

b. but larger cavities usually need to be \_\_\_\_\_\_\_\_\_\_\_\_.

***IV. Fill in the gaps with the correct word or word-combination from the word bank:***

|  |
| --- |
| *pregnancy fluoride mouth rinses hygiene sugars*  *strengthens accumulates brush maintaining daily* |
| 1. If you do snack, \_\_\_\_\_\_\_\_\_\_\_\_ teeth afterward or chew sugarless gum. 2. People need to floss \_\_\_\_\_\_\_\_\_\_\_\_ to get rid of food particles stuck between their teeth. 3. The dental hygienist explained how plaque \_\_\_\_\_\_\_\_\_\_\_\_\_ on teeth. 4. Good oral \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a part of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ overall health. 5. Antibacterial \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ also reduce bacteria that cause plaque and gum diseases. 6. The plaque combines with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to create acids which dissolve the enamel and cause tooth decay. 7. People with special conditions, including \_\_\_\_\_\_\_\_\_\_\_\_ and diabetes, may require additional instruction and perhaps treatments to keep their mouth healthy. 8. Fluoride \_\_\_\_\_\_\_\_\_\_\_\_\_ developing teeth in children and prevents tooth decay in both children and adults. |

***V. Choose appropriate prepositions. Have you ever tried this procedure?***

One more rather important step of/by keeping health oral cavity is disclosing. It shows patients where the plaque is and how to check if it has been removed. Dental plaque is invisible, but a harmless food dye can be used to show it up/over, letting the patient see where plaque collects, where it has been left behind/above and where extra cleaning is needed. Disclosing dyes can be bought at/in the chemists in/at the form of/on tablets or solutions. Anyone can use plaque-disclosing tablets, but they’re particularly effective for/to youngsters who haven’t established the best brushing and flossing habits. Alternatively, vegetable food dyes can be used.

***VI. Translate into English:***

1. Зубні щітки використовуються для видалення залишків їжі та зубного нальоту зі всіх поверхонь зубів та міжзубних проміжків. 2. При захворюваннях пародонта слід використовувати щітку з більш м’якою щетиною. 3. Термін використання одної зубної щітки не більше шести місяців. 4. Рух зубної щітки при чищенні зубів повинен бути спрямований від щітки зуба в бік ріжучого краю, тобто вертикально. 5. Тривалість чищення зубів, як правило, повинна становити не менше трьох хвилин.

***VII. Translate the following sentences into English:***

Have regular dental checks at intervals recommended by your dentist (this is normally at least once a year). A dentist can detect a build-up of plaque and remove calculus. Early or mild gingivitis can be detected and treated to prevent the more severe periodontitis. A dentist can also advise about special coating of children's teeth to help prevent tooth decay. In addition to the benefits to your teeth, good mouth hygiene may have even further benefits. There is some evidence to suggest that poor oral hygiene is associated with an increased risk of developing heart diseases such as heart attack and angina, and other blood vessel-related problems (cardiovascular disease).

**DENTAL HISTORY TAKING**

|  |
| --- |
| ***Active Vocabulary***  **assessment** – оцінка, оцінювання  **aspiration** – аспірація, відсмоктування рідини з порожнини  **auscultation** – аускультація  **bruxing** – скреготіння зубами під час сну  **to clarify** – прояснювати  **clenching** – стискання (зубів)  **complaint** – скарга |
| **data** *(sing. datum*) – дані, відомості  **diascopy** – діаскопія (метод діагностики хвороб шкіри)  **elicit** – встановлювати, робити висновок  **provisional** – попередній, тимчасовий |
| **etiology** – етіологія, причина виникнення хвороби  **finding** – отримані дані, результати  **gestures** – жест |
| **meaningful** – значущий, важливий  **percussion** – вистукування, перкусія  **previous** – попередній  **recording** – запис, реєстрація  **verbally** – вербально, на словах |
| ***I. Read and translate the following words and word-combinations:***  Case history, proper diagnosis, Accurate diagnosis, provisional diagnosis, final diagnosis, physician, conversation, establishment, initial contact, facial expressions, body posture, voice intonation, meaningful information, comprehensive, previous history, frequency, complications, chief complaint, gingival bleeding, maxillofacial trauma, the eyes, the ears, supporting tissues, probing, vitality tests.  ***II. Read and translate the f text:***  Case history (anamnesis) is an important and integral part of treatment. The treatment of a disease or a condition starts with its proper diagnosis and this can be done successfully only by taking down a proper case history. Accurate diagnosis of a disease depends on the art of taking case history.  Case history is a planned professional conversation that enables the patients to communicate their symptoms, feelings and fear complex to the physician. In many occasions a properly prepared case history alone is sufficient to diagnose the disease without examining the patient.  Steps in case history preparation include the following: general information, history recording, examination of the patient, establishment of provisional diagnosis, necessary investigations, final diagnosis, treatment plan and prognosis.  The interview is the technique used to get a history from the patient. Assessment begins from the moment you make initial contact with the patient, and continues throughout the interview. During the interview you will get information about the patient’s health and feelings – verbally and in writing – while also observing gestures, facial expressions, body posture and changes in voice intonation. In this way there is interaction between you and the patient, which allows you to collect, clarify and expand on meaningful information from the patient’s responses. This type of interview is called the data-collecting interview.  The type of information you get during history taking will depend on the priorities of care and the needs of your patient. A comprehensive history has eight components: 1) demographic details; 2) main complaint or reason for visit; 3) present illness; 4) previous history; 5) history of family illness; 6) systems and body parts; 7) nutritional history; 8) activities of daily living. The following elements should be included in the dental history:  - Past dental visits, including frequency, reasons, previous treatment, and complications  - Oral hygiene practices  - Oral symptoms other than those associated with the chief complaint, including tooth pain or sensitivity, gingival bleeding or pain, tooth mobility, halitosis, and abscess formation  - Past dental or maxillofacial trauma  - Habits related to oral disease, such as bruxing, clenching, and nail biting  - Dietary history  Clinical examination of the patient includes general examination, extraoral examination (skull, the hair, the eyes, the ears, the nose, the symmetry of the face, the lymph nodes, the temporomandibular joint, the neck), intraoral examination (lips, teeth, tooth supporting tissues, oral mucosa, saliva, bones and occlusion). Different techniques of clinical examination are used by the dentist including: visual inspection, palpation, probing, percussion, auscultation, diascopy, aspiration, vitality tests of the teeth and other specific examinations  All bits of information obtained in the history and examination process are called findings. Findings may be normal or abnormal, healthy or pathologic. All findings can generally be grouped as either symptoms (subjective, elicited by history and interview, as described by the patient) or signs (objective, often measurable, discovered by examination).  The written record is the most effective method for transferring permanent data. The written record is a working document of all findings, and all the healthcare givers looking after the patient share this information. Although writing reports is time-consuming, it is efficient because it eliminates the possibility of the data being forgotten and the consequent repetition of data collection.  Diagnosis is an assessment of the findings which specifies what is happening to a patient and why.  Treatment plan is a written plan of treatment which addresses both disease and etiology; it is the end product of data gathering and diagnosis, and it may take one of two forms: emergency or immediate treatment plan and comprehensive or long range treatment plan.  ***III. Find in the text the equivalents for the following words and word-combinations:***  План лікування, оцінювання результатів, робочий документ, ділитися інформацією, ефективний метод, причини візиту, виключати можливість, щелепно-лицьова травма, утворення абсцесу, взаємодія, вираз обличчя, кусання нігтів, достатній, мистецтво збору анамнезу, невід’ємна частина лікування.  ***IV. Answer the following questions:***  1. What is a dental case history?  2. What steps does case history preparation include?  3. What kind of information can you get during the data-collecting interview?  4. What are the components of a comprehensive history?  5. What elements should be included in the dental history?  6. What does clinical examination of the patient include?  7. What techniques of clinical examination do you know?  8. How can all findings be generally grouped?  9. What is treatment plan?  ***V. Insert the missing words given below:***  Collecting \_\_\_\_\_ is not the only purpose of interviewing. Interviews are also conducted to build up a professional relationship with the \_\_\_\_\_\_\_\_; promote communication and ensure that the patient understands the purpose of the \_\_\_\_\_\_\_\_\_; give the health care practitioner an understanding of the patient’s \_\_\_\_\_\_\_\_\_; support the patient during the management and follow-up of the problem. The data-collecting interview has three \_\_\_\_\_\_\_\_:  Phase 1. The introduction. Try to put the patient at ease and win the patient’s \_\_\_\_\_\_\_\_\_\_\_\_.  Phase 2. The active data-collecting phase. During this phase, use various interviewing \_\_\_\_\_\_\_ to encourage the patient to talk. This will help you \_\_\_\_\_\_\_\_ complete and accurate data within the specified time period.   |  | | --- | | Phase 3. The conclusion. Give direction to the patient by \_\_\_\_\_\_\_\_what he/she can expect.  **patient, data, problem, phases, interview, techniques, confidence, explaining, collect** | |
| ***VI. Translate into English:***  1. Щоб поставити правильний діагноз, необхідно зібрати якнайбільше інформації про стан здоров'я пацієнта. 2. При огляді пацієнта стоматолог звертає увагу на колір обличчя, його симетричність, стан шкіри, на мовлення та жувальні рухи. 3. Для обстеження ротової порожнини необхідні добре освітлення, стоматологічне дзеркальце та зонди. 4. Інколи візуального огляду не достатньо, щоб поставити остаточний діагноз.  ***VII. Read the following text, ask approximately 7-8 questions and answer them:***  **Vitality tests of the teeth**  The tooth should be examined for vitality by several tests:  **The cold test**  This is simply done with cylindrically shaped ice sticks. Keep them in the freezer and withdraw the frozen cylinder when needed. A good site of cold application is generally the buccal surface as close to the cemento-enamel junction as possible If a tooth has irreversible pulpitis it will either give a prolonged response, possibly after some delay, or no response. Transient pain (less than ten seconds) after the application and removal of ice is normal. No response may mean the tooth is endodontically involved, especially if all other teeth respond to cold. If sharp transient pain occurs that is greater than the pain felt in surrounding teeth, check to see if the bite is high. Root canal is probably not needed and the bite adjustment will eliminate the hyper response to cold.  **The heat test**  Using a ball of hot gutta percha on the tip of a plastic instrument, place the gutta percha onto the tooth the same way you would the ice. Wait approximately 15 seconds between teeth to assess the possibility of a delayed, but, prolonged response. Compare the results from other tested teeth. If one tooth gives a prolonged response, whether immediate or delayed, it is a most suspicious candidate for endodontics. If the pain is immediately relieved by cold, the tooth probably needs root canal.  **The electric pulp test (EPT)**  This test should be used when the hot and cold tests fail to give clear information on the state of vitality of the tooth. Again, the information supplied by the electric pulp test must be weighed against the response from other teeth. The fact that a tooth does not respond to the EPT has little meaning if all the other teeth also do not respond, unless of course this is the only tooth with a well-defined area at the apex or is quite tender to percussion. |

**AN EMERGENCY DENTAL KIT**

**Active Vocabulary**

### antiseptic wipes – антисептичні серветки

### tweezers – пінцет

### splints – шини

### thermometer – термометр

### suture kit – набір для накладання швів

**gauze –** марля

**scissors** – ножиці

**adhesive tape** – клейка стрічка

**bandage** – пов'язка

**ointment for burns** – мазь від опіків

**instant cold pack** – миттєвий холодний пакет

**cotton applicators** – ватні аплікатори

**rubbing alcohol** – медичний спирт

**hydrogen peroxide** – перекис водню

**pain reliever** – знеболююче

**allergy medication** – ліки від алергії

**gloves –** рукавички

***I. Read and translate text:***

Most of us at one time or another have experienced a dental emergency. It’s some­thing that’s hard to forget because of the associated discomfort and pain. Dental pain can be caused by a variety of emergency conditions ranging from toothaches, a loose crown, a cracked tooth, or a broken or lost filling.

Sudden dental pain can be very intense. While many of us are prepared with emergency First Aid Kits, how many are prepared with a subset which can deal with sudden dental pain? When there is no dentist (on a trip, vacation, camping, hiking, boating), an emergency dental kit may be the best temporary relief alternative until a more permanent solution to the problem can be found.

An emergency dental kit will typically come with step-by-step instructions (usu­ally illustrated) on how to treat the most common dental emergencies (such as a tem­porary filling). A kit usually includes the following items: temporary cement, tem­porary filling, toothache drops, dental wax, denture repair material, cotton, gauze, dental floss, gloves, tweezers, and sanitizing wipes.

In addition, the following precautions must be taken:

1. These products should not be used if throbbing pain or swelling is present.

2. Clean hands before and after each use of the materials in the kit.

3. If any of the liquids come in contact with eyes, flush with water and call your doctor.

4. If rash or itching occurs with use of materials, discontinue and call your phy­sician.

5. Keep out of reach of children, a consumer must be 18 years or older.

Emergency Dental Kits are designed to provide temporary relief for many of the most common dental problems when a patient can’t reach their dentist. The compo­nents of the system are each labelled for safe, easy use. Patients must carefully follow all directions and see their dentist as soon as possible.

***II. Answer the following questions:***

1. Who can experience a dental emergency?

2. What can cause dental pain?

3. When an emergency dental kit may be the best temporary relief alternative?

4. What does a kit usually include?

5. What precautions must be taken?

6. Why an Emergency Dental Kits were designed?

***III. Complete the text using the words in the box:***

|  |
| --- |
| *immediate action treatment*  *dental kit treating dental complications professional aid emergency* |

Emergency dental kits are a temporary means of … oral injury, dental trauma, tooth loss or damage to a tooth restoration. They can also … in the maintenance of an orthodontic appliance or denture. A dental … may trigger toothache, oral pain or tooth damage. By using an emergency … individuals can reduce oral pain and/or save a tooth or dental device in time for … emergency dental care. The faster one acts in a … emergency the higher the likelihood of reducing further dental damage and discomfort. There are instances where a dental emergency requires … to prevent a medical emergency from developing. Seeking professional emergency dentistry …. is vital to restore oral health and dental function, preventing infection and other health … .

***IV. Match the words with their usage:***

1. Cotton Swabs

2. Cotton Balls or Gauze

3. Alcohol Wipes

4. Dental Floss

5. Dental Mirror

6. Gloves

7. Dental Wax

8. Temporary Dental Filling Material

9. Petroleum Jelly

10. Salt

11. Cold Compress

a. Use to dislodge food or objects caught between teeth.

b. Can be used to coat sharp edges, like from broken braces or a chipped tooth.

c. A salt and water mixture can be used as an antibacterial mouthrinse. It can also manage pain and inflammation. Besides a mouthwash, you can create a saline solution to preserve a knocked-out tooth.

d. Use as applicators or to clean areas in the mouth.

e. Can be used as a temporary solution to protect a tooth where a filling was lost.

f. Use to clean and disinfect.

g. Applying a cold compress can reduce swelling and provide temporary pain relief.

h. Use to control any bleeding.

i. Vinyl or latex gloves will be handy if you need to provide care to anyone other than yourself.

j. Applying it to a lost crown can allow you to place it back over the tooth to create a temporary seal.

k. Allows you to view inside the mouth easily.

**COMMON MEDICAL AND DENTAL EMERGENCIES**

***Active Vocabulary***

|  |  |  |
| --- | --- | --- |
| **emergency** – надзвичайна ситуація |  |  |
| **injury** – травма, пошкодження |  |  |
| **disturbance** – захворювання, порушення |  |  |
| **prompt** – швидкий, невідкладний |  |  |
| **fainting** – непритомність, зомління |  |  |
| **consciousness** – свідомість |  |  |
| **syncope** – **непритомність** |  |  |
| **clammy** – липкий |  |  |
| **pallo** – **блідість** |  |  |
| **supine** - положення на спині |  |  |
| **seizure** – припадок, приступ |  |  |
| **wheezing** – дихання з присвистом |  |  |
| **clotting** – згортання крові |  |  |
| **adjunctive** – додатковий |  |  |
| **suture** – шов |  |  |
| **exacerbation** – загострення, погіршення |  |  |
| **chipped** – щербатий |  |  |
| **dislodged** – зміщений, рухливий, відірваний |  |  |
| **knocked (out)** – вибитий |  |  |

***I. Read and translate the text:***

An emergency condition in dentistry is an unexpected event that can include ac­cidental or willful bodily injury, central nervous system stimulation and depression, respiratory and circulatory disturbances, as well as allergic reactions. Prompt man­agement is essential for both medical and dental emergencies. Consequently, dentists and their staff should be prepared to recognize, respond and effectively deal with emergency conditions.

Some medical emergencies may take place in a dental clinic during dental treatment.

Fainting is the most common cause of sudden loss of consciousness. It is normally associated with syncope due to anxiety, fear, fatigue, pain, and the sight of blood or surgical instruments. Symptoms observed before fainting include clammy skin, pallor, bradycardia and low pulse volume followed by tachycardia and loss of consciousness. This medical emergency is usually managed by placing the patient supine with the head lower than the legs to increase blood flow to the brain. In addition, fainting may be a result of a medical condition such as hypotension, seizure, hypoglycemia, hyperven­tilation, allergy, a stroke, or myocardial infarction. If these medical conditions occur dentists should seek medical support by calling immediately for an ambulance.

Anaphylactic shock is a severe, life-threatening allergic reaction. Causative agents of anaphylactic shock include latex, penicillin, several drugs such as cephalosporins and NSAIDS (non-steroidal anti-inflammatory drugs). It should be noted that a true allergic reaction to an injected local anesthetic has a very low incidence in dentist­ry. Signs and symptoms observed during anaphylactic shock are facial swelling and flushing, itching, cold clammy skin, wheezing, dyspnea, abdominal pain, cyanosis with a rapid and weak pulse, hypotension. It is recommended to lay the patient flat and raise their legs, give oxygen, administer epinephrine and antihistamine. Then, the patient should be transported to a nearby hospital.

Prolonged and uncontrolled bleeding is referred to as haemorrhage. Major hae­morrhages are not common in oral surgery except in patients who have bleeding or clotting disorders, or those who are on anticoagulants. In patients with mild or severe bleeding disorders, the goal is to minimize the risk by restoring hemostatic system to acceptable levels and maintaining hemostasis by local and adjunctive methods. In patients with drug-induced coagulopathies, drugs may be stopped or the doses modified. However, uncontrolled and persistent bleeding can occur in some healthy patients after dental extraction. In this case, a dentist should apply a gelatine throm­bin sponge or insert sutures.

Patients may face some types of dental emergencies outside a dental clinic due to a quick exacerbation of dental issues.

Lost filling. In this case advice your patient to rinse out the tooth cavity with warm water and press a cotton ball firmly into it or use an over-the-counter dental cement. It is the best to seek medical attention as soon as possible.

Loss of a crown or cap. Missing crown may trigger pain during eating when food gets in the exposed area. If a crown or cap is displaced placing dental wax or a tem­porary cap can help ease sensitivity.

Severe toothache. If a severe toothache happens, recommend your patients to im­mediately rinse their mouth out with warm water and place a cold compress against their cheek for 20 minutes to alleviate swelling. Remove the compress and let the area warm up and then re-apply the cold compress. Pain medication should not be used directly against the gum. It may inflame the gum and do more damage to the teeth. An immediate visit to a dentist is necessary to check for a bacterial infection.

Chipped or broken tooth. Patients must know that the first thing to do is to save the chipped or fully dislodged tooth. Then, they should rinse the area inside their mouth as well as the tooth that has been displaced with warm water. If there is bleed­ing, some gauze or cotton should be applied to the area for five to 10 minutes. It is necessary to use a cold compress outside their mouth until the swelling goes down. At the dentist’s, clinical examination and radiography are followed by fillings with or without root canal treatment or extraction.

Knocked-out tooth. The best chance of saving a tooth that has been fully removed from a mouth is to visit a dentist within one hour. Until then, the tooth must be kept safely and moist in a small container of milk or in water with some salt added.

***II. Answer the following questions:***

1. What’s an emergency condition in dentistry? What does it require?

2. What’s the most common cause of a sudden loss of consciousness?

3. What does syncope result from?

4. What symptoms are observed before fainting?

5. How is sudden loss of consciousness managed?

6. What triggers anaphylactic shock?

7. What symptoms are associated with anaphylaxis? What’s first aid?

8. What factors can lead to severe haemorrhage?

9. How can major bleeding be prevented and dealt with in dentistry?

10. What types of dental emergencies can patients face outside a dental clinic? How can they be managed?

***III. Agree or disagree with the following statements. Comment your answers:***

1. A medical emergency in the dental office may be a foreseen event. 2. Patients with dental emergencies can postpone their visit to a dental clinic. 3. Fainting is normally associated with syncope due to anxiety, fear, fatigue, pain, and the sight of blood or surgical instruments. 4. Loss of consciousness is usually managed by placing the patient in a sitting position with the head elevated to reduce blood flow to the brain. 5. If a stroke or heart attack occurs dentists should seek medical support by call­ing immediately for an ambulance. 6. If a crown or cap is displaced nothing can help ease sensitivity. 7. Pain medication should be used directly against the gum. 8. If a patient has a chipped or broken tooth, clinical examination and radiogra­phy are followed by fillings with or without root canal treatment or extraction.

***IV. Match the following terms with their definitions:***

|  |  |
| --- | --- |
| 1. syncope | a. sudden loss of consciousness, sensation, and voluntary motion caused by rupture or obstruction of a blood vessel of the brain |
| 2. hypoglycemia | b. bleeding in a very fast and uncontrolled way |
| 3. hyperventilation | c. arrest of bleeding |
| 4. stroke | d. hypersensitivity to foreign proteins or drugs |
| 5. myocardial infarction | e. loss of consciousness resulting from insufficient blood flow to the brain |

***V. Complete the sentences by choosing appropriate prepositions:***

Pulp irritation is one of the causes **for/of** toothaches, as this can occur **after/on** a dental treatment. No matter how well a filling or crown is done the materials that are used to fix the tooth can end **on/up** causing pain later on. Crowns can sometimes come **out/off** or the filling can sometimes come **out/off**. If a tooth is knocked **in/out**, the first thing to do is to look **out/for** that tooth. When the tooth is found, it should be gently scrubbed to get rid **after/of** any dirt or debris. The dentist may be able to put the tooth **back/before** in place if the patient arrives in time. If the tooth is fractured, the treatment will depend **of/on** how bad the trauma is. Minor fractures can normal­ly be smoothed **out/in** using sandpaper.

***VI. Read and translate the following statements and say what IT in each***

***statement relates to. Use the dental terms from the word bank:***

|  |
| --- |
| **a dislodged (luxated) tooth a chipped tooth a loose tooth**  **a cracked tooth a knocked-out tooth** |

1. **IT** has a crack that extends from the chewing surface of the tooth vertically toward the root and is too small to show up on X-rays.

2. **IT** is mobile due to periodontal pockets that form around it.

3. **IT** is an avulsed tooth that has been completely displaced from its socket.

4. **IT** has been partially pushed into or out of its socket, or sideways, during an injury.

5. **IT** has lost a tiny piece of superficial enamel resulting in disfiguring of the tooth or has a severe fracture.

**ANESTHESIA**

***Active Vocabulary***

**anesthesia** – анестезія

**sedation** – вплив заспокійливим засобом, седативний ефект, снодійне

**to inject** – вводити парентерально

**ester** – ефір

**amide** – амід

**invasive** – інвазивний

**topical / local** – місцевий

**penetration** – проникнення

**roadblock** – бар’єр

**vasodilator** – судинорозширювальний препарат

**vasoconstrictor** – судинозвужувальний препарат

**threshold** – поріг (больовий)

**drug-induced** – медикаментозний

**complication** – ускладнення

**disadvantage** – недолік

**advanced** – прогресивний, занедбаний (про хворобу)

**indicated** – показаний (препарат, процедура)

**administration** – застосування

**to depress** – пригнічувати

***I. Read and translate the following text:***

The administration of local anesthesia, sedation and general anesthesia is an inte­gral part of dental practice.

Local anesthesia causes the temporary loss of sensation in some part of the body. It is produced by a locally injected solution. It does not depress the level of con­sciousness. The invention of local anesthetics with the development of nerve block­ade injection techniques marked a new era of patient comfort. Local anesthesia al­lows to perform extensive and invasive dental procedures. Dental anesthetics form two groups: esters and amides. Esters are no longer used as injectable anesthetics. However, benzocaine is used as a topical anesthetic. Amides are used as injectable anesthetics in combination with lidocaine that is also known as a topical anesthetic. Topical anesthetics numb the area to a depth of 2-3 mm and reduce the discomfort of the initial penetration of the needle into the mucosa. Topical anesthetics are available in gel, liquid, ointment, patch, and spray forms. Injectable local anesthetics create a chemical roadblock between the source of pain and the brain by blocking the sodium channel of a nerve. Local anesthetics are vasodilators and are absorbed into the cir­culation. Overdose with local anesthetics can result in CNS depression, convulsions, elevated heart rate, and high blood pressure. Vasoconstrictors are added to injectable local anesthetics to counteract the vasodilatory action and prolong their action.

Sedation is most appropriate for people with dental fear but may also be used when the patient has a low pain threshold, can’t sit still in the dental chair, has very sensitive teeth or needs extensive treatment. Sedation helps patients relax during dental pro­cedures. Minimal sedation is a minimally depressed level of consciousness produced by a pharmacological method (inhalation of nitrous oxide or “laughing gas”, pills). The patient’s ability to respond to tactile stimulation and verbal commands is main­tained. Ventilatory and cardiovascular functions are not affected. Moderate sedation is a drug-induced depression of consciousness during which patients respond pur­posefully to verbal commands, either alone or accompanied by light tactile stimula­tion, may slur their words when speaking and not remember much of the procedure. Deep sedation is a drug-induced depression of consciousness during which patients can be on the edge of consciousness or even unconscious. The ability to independent­ly maintain ventilatory function may be impaired.

General anesthesia is rarely used for dental treatment nowadays. One of the rea­sons for this is that IV conscious sedation works so well for nearly everyone, and is extremely safe. Each general anesthetic carries a certain amount of risk. This means that general anesthesia is only performed in hospitals or specialist clinics where the necessary safety equipment is available. Apart from the risk of serious complications, general anesthesia has a few major disadvantages:

– It depresses the cardiovascular and respiratory systems.

– Laboratory and instrumental tests are required.

– Very advanced training, an anesthesia team, and special equipment and facili­ties are needed.

– The patient can’t drink or eat for 6 hours before the procedure.

– It’s expensive.

– It does not reduce dental anxiety.

However, general anesthesia can be useful or even indicated for certain situations. When conscious IV sedation doesn’t work or oral maxillofacial surgery of certain type must be conducted, general anesthesia is the best option.

***II. Answer the following questions:***

1. What effects are produced by local anesthesia?

2. How are esters and amides used in modern dentistry?

3. What is the action of topical anesthetics and injectable local anesthetics?

4. What protocol questions should the dentist ask his patient before local anes­thesia?

5. What instructions should be followed during local anesthesia administration?

6. What can overdose with local anesthetics result in?

7. When is sedation indicated?

8. What characteristics help the dentists identify the degrees of sedation?

9. Why is general anesthesia rarely used for dental treatment nowadays?

10. What medical specialists work in an anesthesia team?

11. When is general anesthesia indicated?

***III. Agree or disagree with the following statements. Comment your answer:***

1. Local anesthesia is the temporary loss of sensation or pain in the whole body with depressing the level of consciousness.

2. The advent of local anesthetics with the development of nerve blockade injec­tion techniques allows more extensive and invasive dental procedures.

3. Esters are widely used as injectable anesthetics.

4. Topical anesthetics are available in injection solutions.

5. Local anesthetics are vasodilators and are absorbed into the circulation.

6. Overdose with any anesthetic is completely safe and harmless.

7. Sedation is most appropriate for people with dental fear because it helps pa­tients relax during dental procedure.

8. General anesthesia can be performed by any dentist; it doesn’t require any spe­cial preparation of the patient, as well as any necessary safety equipment.

**IV.Complete the sentences. Choose the best answers:**

1. Overdose or misuse of anesthetics can lead to a loss of coordination, lethargy, disorientation, unresponsiveness indicating ***panic attack / CNS depression/ CNS overstimulation***.

2. Repeated painful procedures may result in ***increased pain threshold / normal tolerance of pain / decreased pain thresholdin*** infants.

3. When the patient is under the effect of moderate sedation and doesn’t respond to verbal commands, ***electrical stimulation / tactile stimulation / visual stim­ulation*** is needed.

4. Anesthesia team specialists must have **elementary / intermediate / advanced** training in the provision of anesthesia care.

5. General anesthesia is rarely used for dental treatment nowadays because it is only performed in hospitals or specialist clinics where ***refrigerators / general anesthetics / safety equipment is available***.

6. Some patients with low pain threshold may require an application of the ***local anesthetic / topical anesthetic / general anesthetic*** before the administration of local anesthesia.

7. Injectable local anesthetics create a ***wall / obstacle / roadblock*** between the source of pain and the brain.

8. Vasoconstrictors are added to injectable local anesthetics to ***facilitate / coun­teract / promote*** the vasodilatory action and ***stop / block / prolong*** their action.

***V. Use the prompts to write questions. Then interview your patient who is to receive local anesthesia in order to evaluate his/her health:***

1. you/ ever/ a local or topical anesthetic/ have/ received?

2. there/ any/ were/ reactions/ adverse?

3. you/ any pain/ are/ at this time/having?

4. severe /the pain/ is?

5. have/ how long/ you/ the pain/ had?

6. you/ about/ the dental treatment/ nervous/ are?

7. any medicine or drugs/ you/ have/ during/ the past two years/ taken?

8. you/ to/ are/ any foods or drugs/ allergic?

9. any bleeding problems/ you/ have/ do?

10. have/ or problem/ any chronic disease/ you/ do/ condition?

11. you/ easily/ do/ bruise?

12. you/ pregnant/ are?

***VI. Complete the description of good communication practice using the words in the box:***

|  |
| --- |
| ***important avoid eye relaxed reassuring terminology quickly***  ***ease friendly sit smile close*** |

The clinician initiates communication with the patient by speaking in a \_\_\_\_\_ manner during anesthesia administration. Imagine the patient is a \_\_\_\_ family mem­ber or friend and treat him or her as you wish to be treated yourself. Always try to put your patient at \_\_\_\_ and make them feel \_\_\_. If possible, \_\_\_\_ at the same level as the patient. The expression on your face is \_\_\_\_\_, so \_\_\_\_\_and maintain \_\_\_\_con­tact with your patient. When you talk, don’t rush the patient or speak too \_\_\_\_ and always use a \_\_\_\_\_ open tone of voice. The subject matter can range from describing the process in patient friendly \_\_\_\_, to storytelling or even counting. \_\_\_\_\_ words

like shot, pain, hurt and injection.

**AT THE DENTAL POLYCLINIC**

***Active Vocabulary***

**bite** – прикус

**cautery** – термокаутер

**dental aid** – стоматологічна допомога

**dental drill –** стоматологічний бор

**dental drilling machine** – бормашина

**dental probe** – стоматологічний зонд

**dental surgery** – стоматологічний кабінет

**denture** – протез

**electropathic room** – фізіотерапевтичний кабінет

**fabrication**– виготовлення

**to fit** - припасовувати (про протез)

**gingival hemorrhage** –кровотеча ясен

**gingival injury** –пошкодження ясен

**history-taking** – складання історії хвороби

**injection** - ін’єкція, укол

**loose** - хиткий (про зуб)

**malocclusion** - аномалія прикусу

**radiograph** – рентгенограма

**replacement** - заміщення, заміна

**reveal** – виявляти

**root-needle** – корінна (коренева) голка

**saliva ejector**– слино відсмоктувач

**spittoon** – плювальниця

**syringe** – шприц

**to extract** – видаляти, виривати (зуб)

**to neglect** – не звертати увагу, не доглядати

**universal dental unit** – універсальне стоматологічне обладнання

**warning -** застереження

***I. Read and translate the following words and word combinations:***

Dental clinic, shift work, dental history, tooth loss, irritate the gums, warning signs, areas of decay, suitable, fitting a bridge, to reduce discomfort, routine procedure, correction of malocclusion, professional knowledge, nervous, unreasonable demands, friendly, reassure the patients

***II. Read and translate the text:***

Dental aid is rendered at the dental polyclinic. As a rule, a dental polyclinic is a well-planned and comfortable building with modern conveniences. They are well-equipped with modern devices having a wide choice of dental instruments: bone forceps, hammers, root-needles, dental probes, dental drills and so on. There are specialized rooms such as: procedure rooms, dentists’ surgeries, physiotherapy rooms, X-ray rooms, etc. with a variety of dental equipment: dental drilling machines, universal dental units, elevators, dentists’ chairs. Many specialists work at the polyclinic. They perform all kinds of dental treatment: cure for caries and other diseases of oral tissues, restoration of teeth, extraction of bad teeth, correction of bite, fabrication and placement of dentures to replace missing teeth. Before treating a dental disease it is necessary to make a correct diagnosis, determine its etiology and pathogenesis as well as the symptoms by it can be revealed.

Patients with dental diseases such as: gingival hemorrhage, gingival injury, gingivitis, stomatitis, paradontosis, dental caries and others receive necessary dental care. Medical dental care is on a high standard. It is provided with a great staff of skilled and experienced dentists, nurses. Special attention is paid to providing medical dental aid to children.

Children are examined regularly at kindergartens and schools every year, and if a dental disease or predisposition is revealed they are given proper treatment.

As you know dental caries is a wide-spread disease, and if it is not treated immediately it may run a more acute course and involve a number of teeth and even may invade the organism. If you don’t care of your teeth, you may have your teeth pulled out.

A number of different procedures are considered to help in making diagnosis: history-taking, physical examinations, which includes visual examination, palpation, percussion; laboratory studies; instrumental studies, for example, X-ray examination and others.

A dental room is known to have an operating chair, an operating lamp, a dental engine, an instrumental table, an instrumental cupboard, warm air and water syringes, a cautery, a spittoon, a saliva ejector, a mixing plate and many other things and instruments. Dental treatment is sometimes a very painful procedure. If the pulp cavity is not opened and the carious process is in its initial stage, the tooth is supposed to be treated without pain. That’s why don’t neglect your teeth and visit a dentist regularly.

General dental practice includes mouth examination, diagnosis, treatment, and prevention of disease. The dentist frequently uses X-rays and other equipment to ensure correct diagnosis and treatment. Treatment may include filling cavities, removing the nerves of teeth, treating diseases of the gums, removing teeth, and replacing lost teeth with bridges and dentures. Anesthesia is often used in any treatment that might cause pain. Teeth may be filled with amalgam, or cement. Perhaps one of the most important parts of a dentist’s work is preventive dentistry. If a dentist examines a patient’s teeth at regular intervals, she/he may find and treat a disease it becomes serious.

***III. Answer the following questions:***

1. What modern devices are our dental clinics and polyclinics equipped with?

2. What methods of investigation are used in treating patients?

3. What kind of specialized rooms there are?

4. What kinds of dental treatment do you know?

5. What can you say about medical dental care for children?

6. Why is it necessary to treat dental caries?

7. What procedures help in making diagnosis?

***IV. Give the appropriate English equivalents to the following words and word combinations:***

без болю, болісна процедура, виготовлення протеза, видалення зуба, відсутність зубів, встановити діагноз, збір анамнезу, зубні протези, корекція прикусу, лабораторне дослідження, рентген-лабораторія.

***V. Complete the following sentences with prepositions where required:***

1. Dental aid is rendered \_\_\_\_\_\_dental polyclinic.

2. They perform all kinds of dental treatment: cure \_\_\_\_caries and other diseases \_\_\_\_\_oral tissues, restoration \_\_\_\_ teeth, extraction \_\_\_\_bad teeth, correction \_\_\_\_bite, fabrication and placement \_\_\_dentures to replace missing teeth.

3. \_\_\_\_\_\_\_treating dental diseases it is necessary to make a correct diagnosis, determine etiology and pathogenesis as well as the symptoms \_\_\_\_\_\_which a disease can be revealed.

4. A number \_\_\_\_different procedures are considered to help \_\_\_\_\_making diagnosis.

***VI. Rearrange the following jumbled words into sentences:***

1. Different, make, many, to, help, procedures, a, correct, diagnosis, to.

2. Polyclinic, the, of, dentists, the, kinds, all, perform, of, work, dental, at.

3. Treatment, to, a, be, tooth, sometimes, procedure, painful, very.

4. Try, treat, to, dentists, any, without, new, pain, using, anodynes, the patients.

5. Out, with, you, wash, must, mouth, an, your, antiseptic.

***VII. Read the following dialogue:***

**Sam:** *Hello, Doctor.*

**Dr. Peterson:** *Good morning, Sam. How are you doing today?*

**Sam:** *I'm OK. I've been having some gum pain recently.*

**Dr. Peterson:** *Well, we'll take a look. Please recline and open your mouth...that's good.*

**Sam:***(after being examined) How does it look?*

**Dr. Peterson:** *Well, there is some inflammation of the gums. I think we should also do a new set of X-rays.*

**Sam:** *Why do you say that? Is something wrong?*

**Dr. Peterson:** *No, no, it's just standard procedure every year. It looks like you may have a few cavities as well.*

**Sam:** *That's not good news.*

**Dr. Peterson:** *There are just two and they look superficial.*

**Sam:** *I hope so.*

**Dr. Peterson:** *We need to take X-rays to identify tooth other decay and make sure that there isn't any between the teeth.*

**Sam:** *I see.*

**Dr. Peterson:** *Here, put on this protective apron.*

**Sam:** *Okay.*

**Dr. Peterson:** *(after taking X-rays) Things look good. I don't see any evidence of further decay.*

**Sam:** *That's great!*

**Dr. Peterson:** *Yes, I'll just get these two fillings drilled and taken care of and then we'll get your teeth cleaned.*

***VIII. Read the following and make your own dialogues:***

***Information about a patient:***

1. Name, address, telephone and fax number.

2. Sex, age, occupation

3. Habits – the most common questions about habits are the following: tooth cleaning habits; what toothpaste is used; what type of toothbrush is used; smoking or not smoking.

4. Diet – because it plays an important role in dental caries. For example, caries increased most dramatically during the second part of the 19th century due to 400% increase in sugar consumption! Diet is also responsible for tooth wear.

***General health condition:***

- Known allergies - Heart diseases

- Other diseases - Pregnancy

- Any difficulty to stop bleeding after tooth extraction

***Previous dental treatment (helps to estimate a degree of caries risk):***

- How regularly does the patient come for check-ups?

- Are the fillings old or new?

- How often does the patient replace his/her fillings/crowns?

- Was there any periodontal treatment received?

**PREPARARION AND FILLING OF THE CAVITY**

***Active Vocabulary***

**to alleviate** – полегшувати

**to even out** – вирівнювати, згладжувати

**to repair** – відновлювати

**composite** – композит, суміш

**porcelain** – порцеляна

**amalgam** – амальгама для зубної пломби

**silver** – срібло

**inlay** – зовнішня вкладка для пломбування зубів

**onlay** – внутрішня вкладка для пломбування зубів

**to hurt (hurt, hurt)** – пошкоджувати зуб; завдавати болю

**numb (adj., v.)** – онімілий, нечутливий; оніміти

**glass ionomer** – склоінометр

**atraumatic** – атравматичний

**resin** – композит (зубопротезна пластмаса)

**to tap** – стукати

**unremarkable** – непримітний

**bonding** – зв'язок

***I. Read and translate the text:***

A cavity preparation is a mechanical procedure that removes caries or existing restorative materials and a limited amount of healthy tooth structures to receive and retain filling materials within the cavity. Cavities can occur on one or more surfaces and can be of various sizes ranging from very small to those that include all five surfaces of the tooth. Cavities can be divided into simple and compound. A cavity which occurs on the surface of the tooth is called simple. A cavity is considered to be a complex one when three or more surfaces are involved. Cavities may be classified according to the location of carious lesions.

A dental filling is a type of restorative dental treatment used to repair minimal tooth fractures, tooth decay or damaged surfaces of the teeth. Filling materials, which include composite, gold, porcelain, ceramic, silver or amalgam may be used to even out tooth surfaces for better biting or chewing. There are also composite fillings, made of plastic and glass. A filling can be helpful in three ways:

* it stops food, air and water from entering the cavity alleviating discomfort and pain;
* it stops the decay from growing deeper and prevents a tooth abscess;
* it can help save the tooth, so the person can use it for many years.

One of the most common oral health problems is decay. Enamel loss is a common component of tooth decay, and may result in tooth sensitivity. In many cases, sensitivity caused by enamel loss will be significantly improves or completely eliminated by placing an appropriate dental filling material. A dentist will examine the teeth using a dental probe as well as take an X-ray to determine the extent and exact location of the cavity and decay. Bases on the medical history, location of the cavity, esthetic needs, biting force, durability, cost, number of visits, the dentist will determine the best filling option, whether it is direct composite bonding, amalgam (silver), gold or inlays/onlays created in a dental laboratory. When a tooth hurts, there is no need to take it out. There may be a way to treat and keep it. Otherwise, a cavity must be filled if there is an abscess in the tooth. The clinical signs of abscess include swollen face, permanent pain and a severe toothache or tapping tooth. If you cover up an abscessed tooth with some filling material, it will make the problem worse. Some pressure usually builds up inside the filled tooth resulting in even more pain and swelling. However, if root canal treatment can’t be performed, and abscessed tooth must be extracted immediately. So, swelling of the face or gums is unremarkable. If it hurts only when eating or drinking something cold or sweet, or when breathing cold air, the decay is deep enough for the nerve to feel temperature changes. The tooth can be saved by filling a cavity as soon as possible.

First, the dentist will numb the area with a local anesthetic. The dentist will then use a drill to remove the decay. He or she will probe and clean the area to check all the bacteria and decay has gone. If the decay is deep, the dentist will apply glass ionomer to fill the area. Then the dentist will add the filling material in layers, using special light to cure each layer. Them the dentist will shape and polish the final restoration.

Dentists make most fillings in one appointment, but indirect fillings require two visits. A patient will receive a temporary filling on the first appointment, and a permanent one on the second visit.

A permanent filling is made to last for many years. A dental worker trained in Atraumatic Restorative Treatment (ART) can fill the cavity with a sticky material called glass ionomer or an experienced dental worker can shape the cavity with a dental drill and fill it with a combination of materials called amalgam or composite.

A cement filling is a temporary filling material meant to last only a few months. It helps the person feel more comfortable until it is possible to get a permanent filling.

***II. Find in the text the correct equivalents to the following word-combinations and make sentences with them:***

|  |  |
| --- | --- |
| 1. відновити пошкоджену поверхню зубів | a) to save a tooth by filling |
| 2. розгладити поверхню зуба | b) to numb the area with local anesthetic |
| 3. призвести до чутливості зубів | c) to examine teeth using a dental probe |
| 4. полегшити біль і дискомфорт | d) to shape the cavity with dental drill |
| 5. спричинити біль і припухлість | e) to even out tooth surface |
| 6. врятувати зуб за допомогою пломбування. | f) to result in tooth sensitivity |
| 7.провести обстеження за допомогою зонду | g) to cause pain and swelling |
| 8. знеболити ділянку за допомогою місцевого анестетика | h) to repair damaged surface of the teeth |
| 9. сформувати порожнину бор машиною | i) to alleviate pain and discomfort |

***III. Fill in the blanks with the correct words:***

|  |
| --- |
| **filling restoration numb anesthetic probe cure shape glass ionomer enamel loss** |

1. Dentists use \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to protect the nerve under the tooth.

2. The dentists used a local anesthetic to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the area.

3. Dr.Smith will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the area to check there’s no more decay.

4. The dentist is going to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the filling so that it fits correctly.

5. A light is used to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each layer of filling.

6. Jane needs to see a dentist because \_\_\_\_\_\_\_\_\_\_\_ has come out.

7. The hygienist will clean the tooth and then the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will be complete.

8. A common component of tooth decay that may result in tooth sensitivity is \_\_\_\_\_\_\_\_\_\_\_\_.

***IV. Place the words from the word bank under the correct headings:***

|  |
| --- |
| **gold temporary indirect permanent ceramic amalgam porcelain composite silver resin** |

|  |  |
| --- | --- |
| **Types of Filling** | **Filling materials** |
|  |  |
|  |  |
|  |
|  |

***V. Match the following terms with their definitions:***

|  |  |
| --- | --- |
| 1.glass ionomer | a) the process of returning something to its original condition or something that has been returned to its original condition. |
| 2. composite | b) the slow destruction of something due to natural, chemical changes |
| 3. amalgam | c) a filling fitted where a larger part of the tooth is missing |
| 4. restoration | d) a material made from several different substances |
| 5. indirect filling | e) a painful swelling containing pus |
| 6. temporary filling | f) a weak dental cement made from calcium aluminosilicate glass and a liquid |
| 7. decay | g) a type of filling that is fitted for a shot time while an indirect or other filling is being made elsewhere |
| 8. abscess | h) a mixture of mercury and another metal, often used to fill teeth |

***VI. Complete the sentences by choosing appropriate prepositions:***

A person must know how to take care **for/of** the filling so it won’t break. It is forbidden to eat or drink anything **in/for an** hour to let the filling get hard and strong. Try to used that tooth for biting **after/ before** getting a cement filling **till/until** there is a permanent filling, the cement and sides of the cavity are weak. If the tooth hurts more after the filling is placed, it may result **from/in** an abscess. If dentist can’t extract the tooth immediately because of swelling, take **off/out** the filling to relieve pressure. After finishing, first the dentist should scrape and dried material from/out the tools. Then instruments must be scrubbed **in/with** soap and water and left for/within 20 minutes in disinfectant.

**ROOT CANAL TREATMENT**

***Active Vocabulary***

**root canal –** депульпування зуба та видалення нерва

**crack –** тріщина, щілина

**chip –** надщерблення

**syringe –** шприц, розпилювач

**to omit –** уникати

**to punch –** накладати

**dam –** тонка гумова прокладка

**vinyl –** вініл

**clamp –** скоба, кліпса

**file –** пульпекстрактор

**bleach –** гідрохлорид кальцію, відбілювач

**to dissolve –** ліквідовувати, знищувати

**gutta percha –** гута перча

**cone –** штифт

**to verify –** підтверджувати, перевіряти

**to seal –** герметизувати, пломбувати

**over-the-counter –** безрецептурний

**to schedule –** запланувати

***I.Read and translate the text:***

A root canal treatment is an endodontic procedure used to repair and save the tooth with inflamed and infected pulp or soft tissue inside the root canal. Among possible causes are: deep decay, repeated dental procedure, a crack in the tooth, defective materials.

The main target of a root canal treatment is to remove all the contaminants inside the tooth and to prevent any further infection by sealing the tooth. Performing a root canal treatment an endodontist or a dentist removes the pulp tissue within the tooth.

The success of a root canal treatment depends greatly upon making the patient comfortable. Consequently, the local anesthetic is administered into the gum line, moreover it is strongly recommended to use a topical numbing gel applied to the injection side to reduce any discomfort the needle may cause.

Next step is the injection of a local anesthetic with the syringe just below the tooth receiving a root canal treatment. Afterwards, the patient is given a few minutes to relax and for patient’s mouth to become completely numb. The patient’s mouth is numb, the tooth is isolated, and since the patient’s saliva contains contaminants and the germs’ introduction into the treatment area must be omitted. In this case a tooth is punched with the rubber dental dam (a thin sheet of rubber or vinyl) with a hole cut in it to place it on the tooth, the procedure enables to exclude possible movement. Then the tooth is dried up with an air-water syringe.

Once the tooth is prepared, an endodontist creates the access to the tooth using a drill. The next step is to clean and shape the tooth canal using a root canal file. At this point the dentist must measure the depth of the canal using a combination of X-ray and specialized equipment. Otherwise, a failure in measurement can put the tooth at risk of infection. The canal of the tooth is cleaned with the sodium hypochlorite, commonly referred to as bleach which is left for several minutes, in order to assure that all the bacteria in tissue of the tooth have been dissolved. The bleach is removed with the suction from the tooth. To continue, the rubber compound known as gutta percha is packed into a tooth canal with a plugger and its access is removed by a heated instrument. Afterwards additional X-ray is taken. Once the dentist verifies that the canal has been sealed a filling or crown is placed depending on the location of the tooth. Later on the patient may experience some mild sensitivity and discomfort that can be relieved by using some over-the-counter pain medications.

***II. Make word combinations matching the words from the first column to those of the second, translate them:***

|  |  |
| --- | --- |
| 1.endodontic | a) materials |
| 2. defective | b) anesthetic |
| 3. local | c) dam |
| 4. air-water | d) cone |
| 5. root canal | e) procedure |
| 6. gutta percha | f) medications |
| 7. over-the counter | g) syringe |
| 8. dental | h) file |

***III. Fill the definitions for the items from the box:***

|  |
| --- |
| drill rubber dental dam numbing gel air-water syringe root canal  file bleach plugger gutta percha cone |

1…………………… is a topical anesthesia administered to avoid feeling the needle gliding in.

2. …………………. is a thin piece of latex placed over the tooth during dental procedure.

3. …………………... is defined as a dental device the supplied a focused stream of compressed air, water, or a combination of both.

4. …………………… is an instrument for making or enlarging a hole in a bone or in a tooth.

5. …………………… is a small, metal instrument with spiraled blades, used for cleaning and shaping a pulp canal.

6. …………………… is a pale green, crystalline compound of NaOCl.

7. …………………… is a compound designed to fit the shape of a root canal.  
8. …………………… is a dental instrument used for condensing materials during a dental treatment.

***IV. Match the indications for a root canal treatment with their descriptions:***

|  |  |
| --- | --- |
| 1. deep decay | a line on the surface of a tooth along which it has split |
| 2. repeated dental procedure | tooth filling materials that might have been deficient initially or have deteriorated |
| 3. defective materials | the case when the inner seal is placed when a root canal erodes |
| 4. a crack or chip in the root | the infection that spreads rapidly and affects deeper layers of the tooth |
| 5. a missed root canal | The case when one of the canals is missed allowing the bacteria to remain and spread in it |

**TOOTH EXTRACTION**

***Active Vocabulary***

**recourse** – рішення

**indication** – показання

**retained** – неправильно розвинений

**adjacent** – суміжний

**to loosen** – розхитувати

**malposed** – неправильно розміщений

**malignancy** – злоякісне утворення

**brittle** – лабільний

**socket** – заглиблення в щелепній кістці

**inevitably** – неминуче

**malpractice** – професійна некомпетентність

**sequential** – послідовний

**spongy** – пористий

**disturbed** – тривожний

***I. Read and translate the text:***

When a tooth cannot be repaired with a filling or a crown because of an accident or extensive decay and there is too much damage to it, an extraction may be the best recourse. Some other indications for removing the tooth are: extra teeth that block the other teeth from coming in, retained baby teeth (shark teeth), malposed, cracked teeth and teeth damaged by radiation therapy procedures and chemotherapy.

Depending upon the situation simple or surgical tooth removal procedures are among the options. As a rule, the first type of extraction is selected in case when the tooth or at least its definite portion remains in the mouth. The tooth is being gradually loosened with an elevator and the forceps are used to remove the tooth. The second method is a rather complex procedure that is applied in the circumstances like: broken, cracked or fragile teeth, impacted teeth (wisdom teeth), teeth with curved roots or those with retained root tips.

Regardless of the procedure’s type the dentist must carefully study the patient’s medical history, analyze the data of a panoramic X-ray, and interpret the blood counts. To the contraindications for tooth extraction belong: heavy exposure to radiation, proximity to jaw fracture or the area of malignancy, bisphosphonate therapy resulting in ostechemonecrosis, brittle uncontrolled diabetes, end-stage of renal and liver disease (ESRD and ESLD), uncontrolled leukemia, lymphoma, cardiac dysrhythmias, cerebrovascular accidents (CVA). As well as the first or the last trimester of pregnancy, hemophilia, long-term corticosteroids or immunosuppressant intake are inevitably taken into account.

The forthcoming manipulation is planned and discussed in order to estimate the possible risk consequences, to exclude the malpractice cases, and reduce anxiety.

The procedure of pulling the tooth out presupposes several sequential steps. The first is the tooth numbing where a dental injection (a local anesthetic) is commonly used, though patients with some psychological conditions and children under the age of four may additionally require intravenous anesthesia. The second step is the extraction process. To remove the tooth, the dentist must expand its socket (the place where the root is encased in the bone) by rocking a tooth back and forth. Hence the bone structure is relatively spongy, side-to-side pressure compresses it and helps separate the root from the ligament. Finally, when enough space is created the tooth can be removed easily.

After the tooth has been removed the place of extraction is covered with a piece of gauze and the patient keeps it for 30 minutes in order to create the pressure and form a blood clot that shouldn’t be disturbed. To reduce swelling the ice packs can be applied. Additionally, soft and cool foods are recommended. An extraction side may be rinsed carefully with salt water the next day after the procedure. As a rule swelling and bleeding are relieved within a day or two. The healing process lasts for at least two weeks.

***II. Complete the table with the words from the text:***

|  |  |
| --- | --- |
| extensive |  |
|  | teeth |
|  | lesion |
| removal |  |
| impacted |  |
|  | X-ray |
|  | counts |
| malpractice |  |
| sequential |  |
|  | pressure |
|  | clot |

***III. Form the list of basic words, word combinations, phrases from the text that are used to describe a tooth extraction procedure:***

conscious sedation, general anesthesia, to expend the socket, to rock a tooth back and forth (side-to-side pressure), to bite on a piece of gauze, gentle rinse, initial healing, to estimate the possible risk consequences, to reduce anxiety, tooth numbing, dental injection, intravenous anesthesia, to loosen the tooth with an elevator, an accident or extensive decay, surgical tooth removal procedure, to study the medical history, to analyze the data of panoramic X-ray, to interpret the blood counts.

|  |  |  |
| --- | --- | --- |
| ***Pre-extraction*** | ***Extraction*** | ***Post-extraction*** |
|  |  |  |

***IV. Put the stages of a tooth extraction process in the correct order and discuss them:***

* assessment of the tooth condition
* collection of tests’ results and X-ray images
* selection of the extraction procedure
* reviewing the patient’s medical history
* discussion of the future extraction with the patient
* pain management
* pulling the tooth out
* providing side-to-side pressure
* post-manipulation procedures
* home care

***V. Match the contraindicators for tooth extraction with their definitions:***

|  |  |
| --- | --- |
| **Definition** | **Contradictions** |
| a) is a disease caused by the effect of bisphosphonates. | 1. End-stage of liver disease |
| b) occurs when the liver has sustained severe damage, usually over the course of many years, and is in the process of failing completely. | 2. Hemophilia |
| c) is an abnormal heart beat: the rhythm may be irregular the heart rate may be low or high. | 3. Cardiac dysrhythmia |
| d) (brain stroke) is a condition when the blood flow to a part of the brain is stopped either by a blockage or the rupture of a blood vessel. | 4. Cerebrovascular accident |
| e) is an inherited bleeding disorder in which a person lacks or has low levels of clotting proteins and the blood doesn’t clot properly. | 5. Osteonecrosis of the jaw |

***VI. Complete the post-extraction recommendations with the prepositions from the box:***

Consult your dentist or a maxillofacial surgeon in case when after the tooth extraction:

|  |
| --- |
| ***of in to with after of out at with*** |

* The swelling gets worse instead \_\_\_\_\_ getting better.
* You complain \_\_\_\_\_\_ fever, chills or redness.
* You have trouble \_\_\_\_\_ swallowing.
* You have uncontrolled bleeding \_\_\_\_\_ the area.
* The area continues to ooze or bleed \_\_\_\_\_ the first 24 hours.
* Your tongue, chin or lip feels numb more than 3 \_\_\_\_ 4 hours after the procedure.
* The extraction site turns \_\_\_\_ very painful – this may be a sign that you are dealing \_\_\_\_\_a dry socket.
* If it points \_\_\_\_\_ having an infection, your dentist usually will prescribe antibiotics to overcome it.

***VII. Name the functions of the following instruments and equipment items. Use the example below:***

*e.g. The function of the* ***needle holder*** *is to hold a suture needle.*

|  |  |
| --- | --- |
| 1. dental chair with the tilts | a) provide stability and support |
| 2. mouth prop | b) to remove tooth from bony socket |
| 3. tongue/check retractor | c) to remove tissue or debris from bony socket |
| 4. scalpel | d) to loosen a tooth or its root(s) from bony socket |
| 5. straight elevator | e) to grasp and stabilize soft tissue flaps |
| 6. tissue retractor | f) to deflect and retract the periosteum from bone |
| 7. tissue forceps | g) to cut and remove excess or diseased soft tissue |
| 8. bone curette | h) to hold suture needle |
| 9. extraction forceps | i) to close incision site |
| 10. tissue scissors | j) to cut soft tissue |
| 11. suture | k) to hold tongue and cheek away from surgical site |
| 12. needle holder | l) to keep mouth open during extensive procedures |

**CARIES**

***Active Vocabulary***

**to cause** – спричиняти, викликати

**incipient** – початковий

**dissolution** – розчинення

**noticeable** – помітний

**to expose** – піддавати дії, залишати незахищеним

**explorer** – зонд

**measures** – заходи

**sucrose** – сахароза

**fermentable** – здатний до бродіння

**radiograph** – рентгенівський знімок

**lesion** – пошкодження

**carbohydrate** – вуглевод

**to restore** – відновлювати

**apparent** – очевидний, видимий

**to experience** – відчувати

**frequently** – часто

**criteria** (sing. criterion) – критерії

**to occur** – траплятися, виникати

**to advocate** – підтримувати

**damage** – пошкодження

**to be aware (of)** – знати, усвідомлювати

***I. Read and translate the following words and word-combinations:***

dental caries, demineralization, surface, root, crown, common diseases, carious lesion, stain, spot, lactic acid, health organizations, sign, appearance, dentin, inspection, bad breath, visible, dental mirror, lesion.

***II. Read and translate the text:***

Dental caries is a disease that causes demineralization and dissolution of the dental tissues. This process occurs not only in the crown of the tooth, but also on the root surface, when it is exposed. Today, caries remains one of the most common diseases throughout the world. Cariology is the study of dental caries.

There are four main criteria required for caries formation: a tooth surface (enamel or dentin); caries-causing bacteria; fermentable carbohydrates (such as sucrose); and time. Depending on the extent of tooth destruction, various treatments can be used to restore teeth to proper form, function, and aesthetics, but there is no known method to regenerate large amounts of tooth structure. Instead, dental health organizations advocate preventive and prophylactic measures, such as regular oral hygiene and dietary modifications, to avoid dental caries.

A person experiencing caries may not be aware of the disease. The earliest sign of a new carious lesion is the appearance of a chalky white spot on the surface of the tooth, indicating an area of demineralization of enamel. This is referred to as incipient decay. As the lesion continues to demineralize, it can turn brown but will eventually turn into a cavitation (“cavity”). Before the cavity forms, the process is reversible, but once a cavity forms, the lost tooth structure cannot be regenerated. A lesion which appears brown and shiny suggests dental caries was once present but the demineralization process has stopped, leaving a stain. A brown spot which is dull in appearance is probably a sign of active caries.

As the enamel and dentin are destroyed, the cavity becomes more noticeable. The affected areas of the tooth change colour and become soft to the touch. Once the decay passes through enamel, the dentinal tubules, which have passages to the nerve of the tooth, become exposed and cause the tooth to hurt. The pain may worsen with exposure to heat, cold, or sweet foods and drinks. Dental caries can also cause bad breath and foul tastes. In highly progressed cases, infection can spread from the tooth to the surrounding soft tissues.

Carious lesions can be described further by their location on a particular surface of a tooth. Caries on a tooth's surface that is nearest the cheeks or lips is called "facial caries", and caries on surfaces facing the tongue is known as "lingual caries". Facial caries can be subdivided into buccal (when found on the surfaces of posterior teeth nearest the cheeks) and labial (when found on the surfaces of anterior teeth nearest the lips). Lingual caries can also be described as palatal when found on the lingual surfaces of maxillary teeth because they are located beside the hard palate.

Caries near a tooth’s cervix—the location where the crown of a tooth and its roots meet—is referred to as cervical caries. Occlusal caries is found on the chewing surfaces of posterior teeth. Incisal caries is caries found on the chewing surfaces of anterior teeth. Caries can also be described as "mesial" or "distal." Mesial signifies a location on a tooth closer to the median line of the face, which is located on a vertical axis between the eyes, down the nose, and between the contact of the central incisors. Locations on a tooth further away from the median line are described as distal.

Primary diagnosis involves inspection of all visible tooth surfaces using a good light source, dental mirror and explorer. Dental radiographs (X-rays) may show dental caries before it is otherwise visible, particularly caries between the teeth. Large dental caries is often apparent to the naked eye, but smaller lesions can be difficult to identify. Visual and tactile inspection along with radiographs is employed frequently among dentists, particularly to diagnose pit and fissure caries.

***III. Answer the following questions:***

1. What kind of disease is dental caries?

2. What is tooth decay caused by?

3. Is there any known method to regenerate large amounts of tooth structure?

4. What preventive and prophylactic measures are recommended to avoid dental caries?

5. What is the earliest sign of a new carious lesion?

6. When is it impossible to regenerate the lost tooth structure?

7. What is the sign of active caries?

8. When does the cavity become more noticeable?

9. What causes the tooth to hurt?

10. What does primary diagnosis involve?

11. What kind of caries is called "facial caries”?

12. What kind of caries is called “lingual caries”?

13. What kind of caries is called cervical caries?

14. What is the difference between “mesial” and “distal” caries?

***IV. Insert the missing words given below:***

*caries hygiene percent cause fluoride countries experience cases childhood*

Worldwide, most children and an estimated ninety \_\_\_\_\_\_\_\_\_\_\_of adults have experienced caries, with the disease most prevalent in Asian and Latin American \_\_\_\_\_\_\_\_\_\_ and least prevalent in African countries. In the United States, dental \_\_\_\_\_\_\_\_ is the most common chronic \_\_\_\_\_\_\_\_\_\_\_ disease, being at least five times more common than asthma. It is the primary pathological \_\_\_\_\_\_\_\_\_\_of tooth loss in children. Between 29% and 59% of adults over the age of fifty \_\_\_\_\_\_\_\_\_\_\_\_caries. The number of \_\_\_\_\_\_\_\_\_has decreased in some developed countries, and this decline is usually attributed to increasingly better oral \_\_\_\_\_\_\_\_\_\_practices and preventive measures such as \_\_\_\_\_\_\_\_\_\_\_\_ treatment.

***V. Translate the following sentences into English:***

1.Карієс – одне з найпоширеніших захворювань у світі. 2. Першою ознакою каріозного пошкодження є поява крейдяної білої плями на поверхні зуба. 3. Якщо порожнина вже утворилася, втрачену структуру зуба неможливо відновити. 4. Колір пошкоджених ділянок зуба змінюється. Вони стають м’якими на дотик. 5. Для того, щоб діагностувати карієс, необхідно ретельно оглянути усі видимі поверхні зуба за допомогою стоматологічних інструментів. 6. Інколи буває складно виявити невеликі каріозні пошкодження.

**PULPITIS**

***Active Vocabulary***

**pulpitis** – пульпіт

**to extend** – простягатися, сягати

**to range** – коливатися у межах

**to offset** – заміщати, компенсувати

**pus** – гній

**abscess** – абсцес, нарив

**properly** – належним чином, як слід

**to crack** – тріскатися, розколюватися

**vulnerable** – уразливий

**chamber** – камера

**abrasion** – (патологічне) стертя зуба

**to cure** – лікувати, зцілювати

**erosion** – ерозія емалі та дентину

**compressed** – стиснутий

**to grind** – шліфувати

**irritating** – подразнюючий

**reversible** – оборотний

**to vary** – різнитися, відрізнятися

**irreversible** – необоротний

**to maintain** – підтримувати, зберігати

***I. Read and translate the following words and word-combinations:***

nerves, blood vessels, chamber, to prevent, treatment, damage, periodontal disease, trauma, tooth decay, outer layers, preparation, filling, mild sensitivity, surrounding tissues, dental abscess, collection, bacteria, pus, oral health, hardened tissue, extreme pain.

***II. Read and translate text:***

**PULP DISEASES**

The life or death of a tooth depends on the health of the pulp. This network of nerves, blood vessels, and tissues is housed in a hollow central chamber that extends from the crown of the tooth to its roots. The branch of dentistry that specializes in preventing and treating pulp problems is called endodontics.

Pulpitis is the term for all forms of pulp inflammation. The pulp can be damaged in a number of ways. One of the most common is through undetected tooth decay. Advanced periodontal disease can also infect the pulp.

Pulp damage also occurs when a tooth is broken or knocked out. Abrasion and erosion can wear away the tooth’s hard outer layers, leaving the pulp vulnerable. Finally, the pulp may be injured when your dentist grinds a tooth in preparation for a deep filling or restoration. Pulp damage can be as either reversible or irreversible. It can range from mild tooth sensitivity to complete nerve death of the tooth to infection of the surrounding tissues.

There are several different pulp diseases, including:

**Reversible pulpitis**, or mild inflammation of the pulp. Symptoms typically include pain upon eating or drinking something very sweet, hot, or cold. Without treatment, the inflammation can progress to a dental abscess, a collection of bacteria and pus. Good oral health habits can help offset reversible pulpitis, but in many cases, a filling is eventually needed.

**Irreversible pulpitis**, or severe inflammation of the pulp that can't be cured. Symptoms include sudden intense pain. Left untreated, it can result in a widespread gum and connective tissue infection. Irreversible pulpitis is generally treated with a root canal procedure. If that doesn't work, your dentist may have to remove the tooth.

**Dental pulp calcification (also known as dental pulp stones).** This is a condition in which hardening, or calcification, of pulp tissue results in hypersensitivity and extreme pain because the dental nerves become compressed. A root canal is usually necessary to clear away hardened tissue.

**Dental pulp exposure**. This condition comes on when damage to the external covering of a tooth, such as a cavity or crack in the tooth, exposes the normally protected pulp to bacteria and irritating food particles.

Pain is the most frequent symptom and without proper dental care, a mild infection can progress into a serious abscess. Depending on the type of pulp disease, symptoms may vary in intensity and can include:

• Pain in a tooth or teeth when you eat something very sweet, hot, or cold;

• Sudden, intense pain in the mouth;

• Infection in the mouth. If pulp diseases aren't properly managed, you can lose your teeth.

If damaged pulp in your tooth isn't taken out, a severe infection can spread to surrounding tissue, including your jaw bone. A root canal procedure to remove the pulp tissue is usually performed over several visits by a regular dentist or a pulp specialist, called an endodontist. The root canal therapy may spare you from having to get the infected tooth removed.

Here’s what you can expect from root canal therapy:

*First visit.* The diseased pulp is removed and the empty space, the root canal, is cleaned out and enlarged. Special medications may be placed in the canal to disinfect the area. A temporary filling may be placed as well, or your dentist may choose to leave the canal open and let the tooth drain for a few days. An oral antibiotic may also be recommended to treat infection in the tissues surrounding your tooth.

*Second visit.* The temporary filling is removed and a permanent filling is placed.

*Final visit.* A crown is placed over the tooth to reinforce the tooth and make it stronger.

***III. Answer the following questions:***

1. How can the pulp be damaged?

2. What pulp diseases can you name?

3. What are the symptoms of reversible pulpitis?

4. What can untreated irreversible pulpitis result in?

5.Why does the patient experience extreme pain in case of dental pulp calcification? 6. What kind of condition is dental pulp exposure?

7. What symptoms of pulp diseases do you know?

8. What is the best way to prevent pulp diseases?

***IV. Insert the missing words:***

1. Pulp damage can range from mild tooth \_\_\_\_\_\_\_ to complete nerve death of the tooth to infection of the \_\_\_\_\_\_\_\_\_ tissues.

2. The branch of \_\_\_\_\_\_\_\_ that specializes in preventing and treating pulp problems is called endodontics.

3. Pain is the most \_\_\_\_\_\_ symptom of dental pulp exposure.

4. Advanced periodontal \_\_\_\_\_\_\_ can also infect the pulp.

5. The pulp may be injured when your dentist grinds a tooth in \_\_\_\_\_\_\_\_ for a deep filling or restoration.

6. Poor dental \_\_\_\_\_\_\_\_ is the main reason for tooth decay, tooth pain, and other oral health conditions.

***V. Insert the missing words given below:***

*tissues pulpitis pain source pressure hard cavity body teeth*

When the pulp becomes inflamed \_\_\_\_\_\_\_\_\_ begins to build up in the pulp cavity exerting pressure on the nerve of the tooth and the surrounding \_\_\_\_\_\_\_. Pressure from inflammation can cause mild to extreme \_\_\_\_, depending upon the severity of the inflammation. Often, \_\_\_\_\_\_\_ can create so much pressure on the tooth nerve the individual will have trouble locating the \_\_\_\_\_\_\_of the pain, confusing it with neighbouring \_\_\_\_\_\_. Unlike other parts of the \_\_\_\_\_ where pressure can dissipate through the surrounding soft tissues and where lymph can reach, the pulp \_\_\_\_\_\_\_\_ is very different. The dentin surrounding the pulp is \_\_\_\_\_\_ and does not give under the pressure of the inflammation so the pressure has very little chance of dissipating before pulpal necrosis occurs.

**DENTAL ABSCESS**

***Active Vocabulary***

**severe** – сильний (біль)

**throbbing** – пульсуючий (біль)

**pus** – гній

**affected tooth** – уражений зуб

**tenderness** – чутливість, м’якість

**swelling** – набряк, припухлість

**bad breath** – неприємний запах з рота

**to drain away** – випустити, відкачати (гній)

**painkillers** – знеболюючі

***I. Read and translate the text:***

A dental abscess is a collection of pus that forms in your teeth or gums. It forms as the result of a bacterial infection. The main symptom of dental abscess is a severe, throbbing pain in the affected tooth or gum. The pain usually comes on suddenly, may gradually get worse over a few hours or a few days, causes teeth to be tender and sensitive. Sometimes the pain may spread to an ear, lower jaw and neck, on the same side as the affected tooth. There can also be severe swelling in the face, which can spread if the abscess is not treated.

***Other symptoms can include:***

* tenderness of tooth and surrounding area;
* sensitivity to very hot or cold food and drink;
* an unpleasant taste in the mouth;
* bad breath (halitosis);
* a general feeling of being unwell;
* difficulty opening of the mouth;
* difficulty swallowing (dysphagia);
* disturbed sleep;
* high temperature (fever)

***Causes of dental abscess***

Dental abscesses usually happen when pus builds up beneath teeth and gums when you have an infection in the mouth. You may have a dental abscess if:

* you have a tooth that has not grown out of your gums properly (an impacted tooth);
* you have tooth decay or gum disease;
* you have injured your teeth, gums or mouth;
* you’re having radiotherapy or chemotherapy

Dental abscess is usually treated by a dentist. The dentist will drain away the pus. If a problem with the tooth has caused the abscess, you may need root canal treatment, or the tooth may be removed. You’ll be given a local anesthetic, so you don’t feel any pain. You may be offered painkillers to take for a few days after treatment and may also be given antibiotics.

***How to prevent dental abscess***

There are some things you can do to help prevent dental abscesses:

* brush your teeth with fluoride toothpaste at least twice a day – spit after brushing, do not rinse;
* clean in between your teeth every day using floss or interdental brushes;
* replace your toothbrush every 1 to 3 months;
* have regular dental check-ups;
* don’t use mouthwash straight after brushing your teeth;
* don’t smoke;

***II. Insert correct words into each gap:***

***Drainage salt extract incise pulp chamber areas swelling weakened cut capped with restored***

The goal of treatment is to get rid of the infection. To do this, your dentist may: **\_\_\_\_\_\_\_\_\_\_\_**and drain the abscess. The dentist makes a small \_\_\_\_\_\_ into the abscess, allowing the pus to drain out. The dentist then washes the area with \_\_\_\_\_\_\_\_\_\_\_\_ water (saline). Occasionally, a small rubber drain is placed to keep the area open for \_\_\_\_\_\_\_\_\_\_\_\_\_\_while the \_\_\_\_\_\_\_\_\_\_goes down.

* Do a root canal. This can help get rid of the infection and save your tooth. To do this, your dentist drills down into your tooth, removes the diseased central tissue (pulp) and drains the abscess. The dentist then fills and seals the tooth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and root canals. The tooth may be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a crown to make it stronger, especially if this is a back tooth. If you care for your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_tooth properly, it can last a lifetime.
* Pull the affected tooth. If the affected tooth can't be saved, your dentist will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the tooth and drain the abscess to get rid of the infection.
* **Prescribe antibiotics.** If the infection is limited to the abscessed area, you may not need antibiotics. But if the infection has spread to nearby teeth, your jaw or other \_\_\_\_\_\_\_\_\_\_\_\_\_, your dentist will likely prescribe antibiotics to stop it from spreading further. Your dentist may also recommend antibiotics if you have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ immune system.

**III.** ***Use the correct form of the words to complete the sentences. You may use some of the words more than once. In some cases, more than one word may be correct:***

***result effect affect consequence influence***

1. I missed the train this morning and as a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I was late for school. Then, I had to face the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_when my teacher saw me.

2. Smoking has a negative \_\_\_\_\_\_\_\_\_\_\_\_ on your health.

3. The football players’ performance was \_\_\_\_\_\_\_\_\_\_\_\_\_ by the rain.

4. Bob’s friends have had a positive \_\_\_\_\_\_\_\_\_\_\_\_\_on him and his \_\_\_\_\_\_\_\_\_\_\_\_ have improved.

***injure wound hurt collapse harm***

1. During the earthquake a number of buildings \_\_\_\_\_\_\_\_\_\_\_\_and hundreds of people were \_\_\_\_\_\_\_\_\_\_\_\_\_.

2. My grandfather fought in World War II, but he was sent home when he was \_\_\_\_\_\_\_\_\_\_\_\_\_.

3. Let go of my hand! You’re are \_\_\_\_\_\_\_\_\_\_ me!

4. The dog won’t \_\_\_\_\_\_\_\_\_\_\_ you. It’s friendly.

5. The athlete has a heart attack and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ as he was running.

***damage injury wound pain ache***

1. John was in a lot of \_\_\_\_\_\_\_ when he cut his finger with a knife and had to have the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ stitched.

2. The hurricane caused millions of dollars’ worth of \_\_\_\_\_\_\_\_\_\_\_\_\_.

3. After a couple of days the \_\_\_\_\_\_\_\_\_\_\_ in my lower back had gone.

4. Kelly’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_ was serious, so she was taken to hospital.

***endanger risk threaten warn***

1.I must \_\_\_\_\_\_\_\_\_\_ you about my dog – it’s vicious.

2. The security guards dealt with the robbers without \_\_\_\_\_\_\_\_\_\_\_\_\_ any lives.

3. Our neighbours \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to call the police if we didn’t turn the music down.

4. The World Wildlife Fund updates its list of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ species every year.

5. She \_\_\_\_\_\_\_\_\_\_\_ her life to save the young boy from drowning.

***illness disease infection sickness weakness accident incident***

1.If you don’t want to get a(n) \_\_\_\_\_\_\_\_\_\_\_. I suggest you clean and dress the wound.

2. Penicillin has been used to fight many infectious \_\_\_\_\_\_\_\_\_\_\_\_.

3. Some people suffer from altitude \_\_\_\_\_\_\_\_\_\_ at many mountain ski resorts.

4. Young children come down with many \_\_\_\_\_\_\_\_\_\_\_ when they first go to school.

5. Charles had a (n) accident at work and he was taken to hospital.

6. I must be coming down with the flu because I have a general feeling of \_\_\_\_\_\_\_\_\_\_.

7. A serious \_\_\_\_\_\_\_\_\_\_\_\_\_\_ near the border made the government take strict measures concerning immigration.

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**PERIODONTAL DISEASES**

***Active Vocabulary***

**to release** – виділяти, відпускати

**to worsen** – погіршувати

**immunosuppression** – пригнічення імунітету

**malnutrition** – недоїдання

**pus** – гній

**sore** – виразка

**misaligned** – зміщений

**to discourage** – перешкоджати

**by-product** – побічний продукт

**tissue graft** – пересадка тканини

**outlook** – перспектива, вигляд

**scaling** – видалення зубного каменю

**root planing** – вирівнювання поверхні кореня зуба

**tartar** – зубний камінь

**pocket** – кишеня

**puberty** – статеве дозрівання

**to inflame** – запалювати

**diabetes** – діабет

***I. Read and translate the text:***

Periodontal disease is a common, complex, inflammatory disease characterized by the damage of tooth-supporting tissues of the periodontium including periodontal ligament and alveolar bone.

Periodontal disease is caused by bacteria in dental plaque. In an effort to get rid of the bacteria, the cells of immune system release substances that inflame and damage the gums, periodontal ligament or alveolar bone. Some factors increase the risk of developing gum disease. They are poor oral hygiene, smoking, genetics, pregnancy, diabetes, chemotherapy drugs, steroids, oral contraceptives and stress.

Different classifications of periodontal diseases have been used over the years. Traditionally, periodontal diseases have been divided into two major categories: gingival diseases and periodontal disease. The former includes disease that attack only gingiva, whereas the latter includes diseases that involve the supporting structures of the tooth.

One of the following forms of periodontal disease may be diagnosed depending on a patient’s age and symptoms. Gingivitis is recognized as the mildest and the most common form of periodontal disease, it is characterized by inflamed gum tissues. Untreated gingivitis increases the risk of developing serious periodontal problems in future. Gingivitis is reversible with professional treatment and good oral hygiene. Diabetics, pregnant women, and steroid users face increased risks of developing gingivitis. **Chronic Periodontal Disease** is diagnosed when gingivitis develops into a full-blown periodontal disease. The gum and bone tissues worsen at a steady pace, and this is generally associated with people over the age of 40. This is the most frequently occurring from periodontitis and is characterized by pocket formation and/or recession of gingiva. Progression of attachment loss usually occurs slowly. **Aggressive Periodontal Disease** involves a rapid worsening of symptoms. Loss of bone and tissue attachment is considerably faster, and this form of gum disease is associated with diabetics and smokers. Aggressive forms of disease usually affect young individuals at or after puberty and may be observed during the second or third decade of life. Necrotizing Periodontal Disease involves tissue death and rapid destruction of periodontal ligament and alveolar bone. It develops in people with existing medical conditions such as chronic stress, HIV, immunosuppression and malnutrition.

All periodontal diseases have similar symptoms but they may vary depending on the form of the condition. In gingivitis red and swollen gums, gums that easily bleed while brushing and flossing, receding gum line, bad breath can be observed. When gingivitis has advanced to the more serious condition known as periodontitis the symptoms are pus between gums and teeth, sores in the mouth, swollen bright red gums, persistent bad breath, loose teeth, a change in the fit of partial dentures, spaces developing between teeth causing periodontal pockets to form. The final stage of gum disease is the most severe, and is characterized by actual loss in the bone and loss of periodontal tissues that support teeth. This results in shifting and loosening of teeth, and tooth extraction may become necessary to remove further infection. Symptoms include chronic bad breath, swollen and bleeding gums, severe receding gums, deep periodontal pockets, loose and misaligned teeth.

To determine the severity of periodontitis a dentist may review a medical history, examine the mouth, measure the pocket depth (periodontitis may be suspected of pockets are deeper than 4 mm), take dental X-rays to check for bone loss in regions where deeper pocket depths are detected.

Treatment may be performed by a periodontist, a dental hygienist or a dentist. The goal of periodontitis treatment is to clean the pockets around teeth and prevent damage to surrounding bone. If periodontitis isn’t severe, treatment may include less invasive procedures including scaling, root planing, antibiotics.

* **Scaling** removes tartar and bacteria from the tooth surfaces and beneath the gums.
* **Root planing** smoothes the root surfaces discouraging further build-up of tartar and bacteria, and removes bacterial by-products.
* **Topical or oral antibiotics** are prescribed to control bacterial infection.

In advanced periodontitis treatment may require dental surgery such as **flap surgery (pocket reduction surgery), soft tissue grafts, bone grafting, tissue stimulating proteins.**

More than one in three people over the age of thirty have a form of periodontal diseases that has advanced beyond gingivitis. The outlook is good if periodontal disease is recognized early and treated aggressively. Quitting smoking is very important for periodontal therapy to be successful. Lifelong maintenance will be required once the disease is controlled. Daily brushing and flossing (morning and night) and regular visits for professional cleaning can help prevent periodontitis or treat it at an early stage.

***II. Match the English word combinations with the Ukrainian ones and make sentences of your own:***

|  |  |
| --- | --- |
| 1. запалювати та пошкоджувати ясна | a) supporting structures of the teeth |
| 2. позбавлятися бактерій | b) soft tissue grafting |
| 3. підтримуючі структури зуба | c) change in the fit of dentures |
| 4. втрата кріплення кістки та тканини | d) to result in shifting and loosening of teeth |
| 5. видаляти зубний камінь з поверхні зуба | e) loss of bone and tissue attachment |
| 6. пересадка м’яких тканин | f) to get rid of the bacteria |
| 7. зміна положення зубного протезу | g) to remove tartar from the tooth surface |
| 8. призводити до зміщення та розхитування зубів | h) to inflame and damage the gums |

***III. Complete the following sentences according to the text:***

1. Traditionally, periodontal diseases have been divided into two major categories \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

2. The factors increasing the risk of developing gum disease are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3. Gingivitis is recognized as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

4. Chronic periodontal disease is diagnosed when gingivitis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. Aggressive forms of disease usually affect \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. The final stage of gum disease is the most severe, and is characterized by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

7. The goal of periodontitis treatment is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

8. To determine the severity of periodontitis a dentist may\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

9. If periodontitis isn’t severe, treatment may include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

10. Topical or oral antibiotics are prescribed to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

***IV. Fill in the gaps with the correct words or phrases from the list below:***

|  |
| --- |
| **pockets plaque periodontal diseases children reversible flossing bleeding range** |

1.The build-up of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ below the gumline causes the gums to become inflamed.

2. When the disease progresses, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ deepen leading to gum tissue and bone destruction.

3. Chronic periodontitis predominantly affects adults, but aggressive periodontitis may occasionally occur in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

4. In the earliest stages of \_\_\_\_\_\_\_\_\_\_\_\_\_ ,gingivitis, the infection affects only the gums.

5. Daily brushing and \_\_\_\_\_\_\_\_\_\_\_\_\_\_, when done correctly, can help to remove most of the plaque from your teeth.

6. Gingivitis is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with professional treatment and good oral home care.

7. Treatment options \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from nonsurgical therapies to control the growth of bacteria to surgery to restore supportive tissue.

8. The symptoms of gum disease include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and swollen gums, persistent bad breath, receding gums, formation of deep pockets between teeth and gums.

***V. Match the terms with the definitions:***

|  |  |
| --- | --- |
| 1.Gingival recession | a) is a pathologically deepened gingival sulcus. |
| 2. Pocket | b) is the exposure in the roots of the teeth caused by a loss of gum tissue. |
| 3. Scaling | c) is the specialized tissues that both surround and support the teeth, maintaining them in the maxillary and mandibular bones. |
| 4. Periodontium | d) is a type of dental cleaning that reaches below the gumline to remove plaque build-up. |
| 5. Pus | e) is the leading method for treating and repairing periodontal pockets if they can’t be removed by cleaning and scaling. |
| 6. Flap surgery | f) is used to replace lost bone tissue and encourage natural bone growth, to create a stable base for dental implant placement. |
| 7. Bone grafting | g) is an exudate, formed at the site of inflammation during bacterial or fungal infection. |

**DENTAL PROSTHETICS**

***Active Vocabulary***

**suitable** – відповідний, придатний

**substitute (v./n.)** – заміняти; заміна, замісник

**to strengthen** – посилювати, зміцнювати

**frail** – крихкий

**self-esteem** – самооцінка

**stiff** – жорсткий

**removable** – знімний

**veneer** – вінір, облицювання зуба

**fixed** – незнімний, закріплений

**to maintain** – підтримувати, утримувати

**gap** – прогалина

**intact** – неушкоджений, цілий

**to anchor** – закріпляти

**dentifrice** – зубний порошок, зубна паста

**harsh** – жорсткий

**sodium fluoride** – фторид натрію

**impact (v./n.)** – вплив; мати вплив на, позначитися на

**consequence** – наслідок, результат

**alloy** – сплав

**titanium** – титановий сплав

***I. Read and translate the text:***

Prosthodontics or dental prosthetics is an area of dental specialty focused on the restoration and replacement of teeth using suitable substitutes such as crowns, bridges, veneers and dental implants. The primary goal of it is to restore chewing function and aesthetic look. Usually dental prosthesis is required when tooth crown is affected by caries, teeth are sealed with large sealants or when teeth are worn or they are lost. Dental prosthetics comprises restoration of lost teeth, restoration of chipped or broken teeth, strengthening of weak, fail or dead teeth, and improvement of the aesthetic tooth appearance.

Losing teeth can cause more than health problems. It directly affects self-esteem as tooth loss has destructive impact on a person’s smile and the way the face looks. The other consequences of tooth loss are speech problems, avoiding certain foods because of chewing problems, stiff jaws and problems with relaxation, weakening of other teeth. In this case a prosthodontist is a specialist one has to deal with.

Teeth can be restored by using two types of dental prosthetic appliances: removable and fixed. **A dental prosthetic appliance** is and intraoral prothesis used to restore the defects in oral cavity such as missing teeth, missing parts of teeth, and missing soft or hard structures of the jaw and palate. **Removable prosthodontics** includes replacing missing teeth and tissue with appliances that the patients themselves can take in and out of their mouth, such as complete dentures (which replace an entire arch of missing teeth) and partial dentures (which replace one or more missing teeth). Fixed prosthodontics includes replacing missing and/or broken teeth and tissue with restorations that the patient cannot take in and out, such as veneers, crowns, bridges and implants, inlays and onlays.

Certain factors usually determine the choice of treatment between removable and fixed dental prosthesis. They include a number of missing teeth, patient preference, soft tissue and bone support, costs. Removable prosthesis is given as an option when all teeth are lost in the lower or upper jaw. The area where the teeth are placed in order to function properly is an important determiner of whether one will have fixed or removable dental implants. Removable teeth are easy not only to maintain but also to clean. Removable teeth are mainly acrylic in the nature without a base, permanent teeth have bridges or crowns and are made using a combination of gold and porcelain.

**Partial and complete dentures** are removable and replace several (partial) or all (complete) missing teeth. Since they are not fixed, they are not so comfortable as implants or bridges, and do not help to chew foods as effectively.

**Veneers** may be a good choice when tooth colour is undesirable and bleaching doesn’t help. The most natural-looking and durable veneers are made from porcelain, but composite materials are more economical. They can be applied in cases where the aim is to improve the appearance of teeth rather than to repair damage from decay.

**Crown** (also known as a cap) is tooth-shaped cover that goes on top of the existing tooth. When there is little of tooth structure remaining or most of the tooth consists of filling material, then making a crown is indicated.

Bridge is a structure that replaces missing tooth and is fixed on the neighbouring teeth. Bridge is indicated when teeth surrounding the gap are destroyed and need crowns. When neighbouring teeth are intact or have small defects, then it is better to replace a missing tooth with an implant.

**An implant** is an artificial root that is anchored to the bone and covered with a crown. It feels like a real tooth and does not require other teeth support. Implants are made of titanium and other materials that are well accepted by the body. Dental implants are considered to be the best and most comfortable tooth replacement solution. They are also the most expensive.

**Inlays and onlays** (fillings made in dental lab) can be made from gold alloy or porcelain fitted to a cavity in a tooth and cemented into it. An inlay is used when a damaged area is confined to the space within the cusps of a tooth, while an onlay is designed to cover the cusps and the sides of the tooth.

To protect dental appliances everyone has to be aware of the following key points on choosing safe home-care products. Toothpaste or gel needs to be low abrasive. Dentifrice with stannous fluoride, sodium fluoride, baking soda and smoker’s toothpaste must be avoided. Bleaching and whitening products are particularly harsh and forbidden completely. The implant can accumulate plaque too, so it is necessary to take good care of dental prosthesis following the rules of oral hygiene.

***II. Fill in the correct words from the box. Make up sentences of your own:***

|  |
| --- |
| **tissue denture filling bleaching to restore appliance to accumulate fixed** |

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dental prosthetics

2) soft \_\_\_\_\_\_\_\_\_\_\_support

3) partial \_\_\_\_\_\_\_\_\_\_\_\_\_

4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ material

5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ toothpaste

6) \_\_\_\_\_\_\_\_\_\_\_\_\_\_plaque

7) removable dental \_\_\_\_\_\_\_\_\_\_\_

8) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ chewing function

***III. Choose the appropriate word or word combination:***

1.Dental prosthesis is required when tooth crown is ***affected/influenced*** by caries, teeth are filled with large sealants or when teeth are worn or they are lost.

2. A dental prosthetic appliance is an intraoral ***technique/prosthesis*** used to restore the defects in oral cavity such as missing teeth, missing parts of teeth, and missing soft or hard structures of the jaw and palate.

3. ***Complete/partial*** dentures replace an entire arch of missing teeth.

4. Permanent teeth have bridges or crowns and are made using a combination of ***silver/gold*** and porcelain.

5. ***Veneers*** are made from porcelain and they are used mainly for the front teeth/molars.

6. Where there is a little of tooth structure remaining or most of the tooth consists of filling material, then making a ***crown/bridge*** is indicated.

7. ***An inlay/onlay*** is used when the damaged area is confined to the space within the cusps of a tooth.

8. Bleaching and whitening products are particularly ***harsh/gentle*** on dental prosthetics.

***IV. Match the term with the definition:***

|  |  |
| --- | --- |
| 1.Prosthodontics | a) is a removable prosthesis that replaces all teeth within an arch. |
| 2.Complete denture | b) is a thin shell of medical-grade ceramic that is attached to the front surfaces of teeth for an immediate smile transformation. |
| 3.Dental veneer | c) is an area of dental specialty focused on the restoration and replacement of teeth. |
| 4. Prosthetic appliance | d) is a fixed dental restoration used to replace missing teeth by joining an artificial tooth or dental implants. |
| 5. Bridge |  |
| 6. Crown | e) is used to restore intraoral defects such as missing teeth, missing parts of teeth, and missing soft or hard structures of the jaw and palate. |
| 7. Implant | g) is an artificial restoration that fits over the remaining part of a prepared tooth, giving it the shape of a natural tooth |

**TYPES OF DENTURES**

***Active vocabulary***

**complete denture** – суцільний протез

**partial denture** – частковий протез

**gum tissue** –тканина ясен

**healing period –** період загоєння

**disadvantage** – недолік

**solution** – розчин

**adjacent crowns** – суміжні (прилягаючі) коронки

***I.Read and translate the text:***

A denture is a removable replacement for missing [teeth](https://www.webmd.com/oral-health/picture-of-the-teeth) and surrounding tissues. Two types of dentures are available – complete and partial dentures. Complete dentures are used when all the [teeth](https://www.webmd.com/oral-health/dental-care-smile-10/slideshow-pretty-teeth) are missing, while partial dentures are used when some natural [teeth](https://www.webmd.com/oral-health/cm/rm-quiz-what-do-you-know-about-your-teeth) remain.

**Complete Dentures**

Complete dentures can be either “conventional” or “immediate”. Made after the teeth have been removed and the gum tissue has begun to heal, a conventional denture is ready for placement in the mouth about eight to 12 weeks after the teeth have been removed.

Unlike conventional dentures, immediate dentures are made in advance and can be positioned as soon as the teeth are removed. As a result, the wearer does not have to be without teeth during the healing period. However, bones and gums shrink over time, especially during the healing period following tooth removal. Therefore a disadvantage of immediate dentures compared with conventional dentures is that they require more adjustments to fit properly during the healing process and generally should only be considered a temporary solution until conventional dentures can be made.

**Partial Dentures**

A removable partial denture or bridge usually consists of replacement teeth attached to a pink or gum-coloured plastic base, which is sometimes connected by a metal framework that holds the denture in place in the [mouth](https://www.webmd.com/oral-health/ss/slideshow-mouth-problems). Partial dentures are used when one or more natural teeth remain in the upper or lower jaw. A fixed bridge replaces one or more teeth by placing crowns on the teeth on either side of the space and attaching artificial teeth to them. This bridge is then cemented into place. Not only does a partial denture fill in the spaces created by missing teeth, it prevents other teeth from changing position. A precision partial denture is removable and has internal attachments rather than clasps that attach to the adjacent crowns. This is a more natural-looking appliance.

***II. Replace the underlined words with the synonyms from the box:***

|  |
| --- |
| **repair neighbouring dentures requirement substituting supplementary suffer improvements** |

1.Brideges in natural teeth have become rare as they need an invasive preparation if the *adjacent* teeth and, in the case of problems, are difficult to repair.

2. Old restorations that don’t meet the functional and aesthetic *demands* must be replaced.

3. if you’ve had any bone loss, a dental procedure known as bone grafting may be performed to *regenerate* the lost bone.

4. Crucial factors to a good long-life performance of *dental prostheses* are strength, intraoral ageing resistance and fatigue resistance.

5. Fixed prosthodontics involves *replacing* the damaged or missing teeth with crowns and bridges which are cemented into a patient’s mouth.

6. *Developments* in the field of implantology have increased the options available for the partially edentulous patient but also made treatment planning more complex.

7. Many people who wear a partial denture eventually *experience* loosening of other natural teeth remaining in the mouth.

8. Sometimes patients who need dentures also need *additional* surgery because of extra bone growth.

***III. Choose the correct variant:***

1. Dentists recommend brushing teeth with a fluoride toothpaste \_\_\_\_\_\_\_\_\_them from decay.

A) arm B) defend C) guard D) protect

2. Have you got toothache? Your face looks \_\_\_\_\_\_\_\_\_\_\_ .

A) big B) enlarged C) expanded D) swollen

3. I had to have two \_\_\_\_\_\_\_\_\_ when I went to the dentist last week.

A) cavities B)feelings C) paddings D) refills

4. She always pays \_\_\_\_\_\_\_\_\_\_\_visits to the dentist.

A) customary B) habitual C) normal D) regular

5. The dentist told him open his mouth \_\_\_\_\_\_\_\_\_\_\_\_\_ .

A) broad B) greatly C) much D) wide

6. He \_\_\_\_\_\_\_\_\_\_ when the dentist touched the bad tooth.

A) alarmed B) dreaded C) laughed D) winced

7. Robert is very \_\_\_\_\_\_\_\_\_\_\_\_ about the cost of his dental treatment.

A) ashamed B) pained C) sorry D) worried

8. I’m \_\_\_\_\_\_\_\_\_\_\_\_ having to pay yet another visit to the dentist.

A) afraid B) dreading C) frightened D) terrified

9. The \_\_\_\_\_\_\_\_\_\_\_ in one of my teeth has come out, so I’m going to the dentist.

A) cover B) completion C) filling D) replacement

10. He made a note of the appointment with his dentist in his \_\_\_\_\_\_\_\_\_\_\_ .

A) diary B) directory C) journal D) register

11. She phoned her dentist to say she was unable to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ her appointment.

A) arrive B) hold C) keep D) stand

12.She put \_\_\_\_\_\_\_\_\_\_\_ going to the dentist although her teeth needed attention.

A) away B) in C) off D) out

13. The small girl had to have four teeth \_\_\_\_\_\_\_\_\_\_\_\_ because they were so bad.

A) broken B) pulled C) taken away D) taken out

14. The loss of a front tooth has left an unsightly \_\_\_\_\_\_\_\_\_\_ in her teeth

A) gap B) hole C) slot D) space

15. In some countries more and more young people now need \_\_\_\_\_\_\_\_\_\_\_ teeth.

A) false B) spare C) unnatural D) untrue

***IV. Fill in the blanks with the words below. You may need to change the form of the words. Each word can be used only once:***

*cavity cement dentist dentures disease equipment examine fill gums interval lose nerve pain practice preventive tooth treat treatment*

**General Dental Practice**

General dental 1)\_\_\_\_\_\_\_\_\_\_\_includes mouth examination, diagnosis, treatment, and prevention of 2)\_\_\_\_\_\_\_\_\_\_\_\_. The 3)\_\_\_\_\_\_\_\_\_\_\_frequently uses X-rays and other 4)\_\_\_\_\_\_\_\_\_\_ to ensure correct diagnosis and 5)\_\_\_\_\_\_\_\_\_\_\_\_.

Treatment may include filling 6)\_\_\_\_\_\_\_\_\_\_\_, removing the 7)\_\_\_\_\_\_\_\_\_\_ of teeth, treating diseases of the 8)\_\_\_\_\_\_\_\_\_\_\_, removing 9)\_\_\_\_\_\_\_\_\_\_\_\_\_, and replacing 10)\_\_\_\_\_\_\_\_\_\_\_\_ teeth with bridges and 11)\_\_\_\_\_\_\_\_\_\_\_. Anesthesia is often used in any treatment that might cause 12)\_\_\_\_\_\_\_\_\_\_. Teeth may be 13)\_\_\_\_\_\_\_\_\_\_\_\_ with amalgam, or 14)\_\_\_\_\_\_\_\_\_\_\_.

Perhaps one of the most important parts of a dentist’s work is 15)\_\_\_\_\_\_\_\_\_\_\_\_ dentistry. If a dentist 16)\_\_\_\_\_\_\_\_\_\_ a patient’s teeth at regular 17)\_\_\_\_\_\_\_\_\_\_\_, he may find and 18)\_\_\_\_\_\_\_\_\_\_\_ a disease before it becomes serious.

**PORCELAIN VENEERS**

***Active Vocabulary***

**thin shells** – тонкі накладки

**dental enhancements** – стоматологічне покращення/вдосконалення

**to resemble** – нагадувати, бути схожим

**minor misalignment** – незначне зміщення

**cracks** – тріщини

**discolouration** – вицвітання, зміна кольору

**durable** – тривалий, стійкий

***I. Read and translate the text:***

Porcelain veneers are thin shells of medical-grade ceramic that are attached to the front surfaces of teeth to get an immediate smile transformation. These cosmetic dental enhancements are made from advanced material that closely resembles the appearance of natural enamel and individually crafted for each person. Porcelain veneers are considered to be one of the most trusted and popular procedures in cosmetic dentistry.

Although veneers have become especially popular in the past decades, they originated during the early days on the film industry nearly one hundred years ago. In the late 1920s, Dr. Charles Pincus, a famous Hollywood dentist, conceived of veneers as a way to improve actors’ and actresses’ smiles on the screen. He would temporarily use false fronts to the stars’ teeth, giving them the stunning smiles that rapidly became a trademark of Hollywood beauty. However, he lacked the technological skills to permanently affix the porcelain. In the late 1960s, Dr. Michael Bunocore created a stronger bonding surface for dental sealants and restorations. In 1982, J.R. Calamia and R.J. Simonsen used Dr. Bunocore’s techniques to the application of porcelain veneers. Suddenly, everyone who wishes to have the stunning Hollywood smiles had access to it. Modern types of porcelain veneers are more sophisticated, stronger and reflect light similarly to natural dental enamel.

People who are considering porcelain veneers are typically looking to address numerous structural or cosmetic problems with their teeth such as gaps between teeth, minor misalignment, cracks and discolouration. In order to have porcelain veneers patients should have good periodontal and overall oral health, have enough amount of healthy enamel, as dentists usually remove some enamel before placing veneers. Veneers can be made from several kinds of dental porcelain. Nevertheless the thin porcelain is not strong enough to repair severely damaged teeth. Veneers are a perfect way to restore teeth with minor structural destruction. If a patient has a broken tooth, large cracks, or severe dental decay, a crown may be the best solution to restore these injuries. Dental implants or bridges can replace missing teeth. Veneers can help to restore a patient’s smile and dental functionality when combined with restorative treatment.

It is important to emphasize that there is no recovery time after receiving porcelain veneers. Patients will be able to drive themselves home from the office, and they also can immediately go about their daily routine including work and physical activity. After the enamel removal patients may temporarily feel some mild discomfort. For about a week, they may need to avoid very cold or hot foods, as well as extremely crunchy, chewy or hard food. When this primary sensitivity wears off, patients should be able to return to their ordinary dietary habits. Veneers last about 10 years on average but their lifespan may increase significantly over the next several years because dental porcelain becomes stronger and more durable. Of course, veneers, like natural teeth, are still easily destroyed and susceptible to any damage. If a veneer breaks or comes off, a patient should carefully store all missing pieces and bring them to the dental office as soon as possible for repair and/or reattachment.

***II. Answer the following questions:***

1.What are the guidelines for post-surgical implant home care?

2.What are the rules of routine implant maintenance?

3. Why is it necessary to follow specific rules of oral hygiene having implants?

***III. Fill in the gaps with the words or word-combinations from the box:***

|  |
| --- |
| resin-composite materials cement tooth-coloured shells place even concerns chipped tooth applied bonded to |

1.Dental veneers are thin, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_that are attached to the front surface of teeth to improve their appearance.

2. They can be used to treat cosmetic \_\_\_\_\_\_\_\_\_\_\_like chipped, broken, discoloured, or smaller-than-average teeth.

3. Dental veneers are often made from porcelain or \_\_\_\_\_\_\_\_\_\_\_\_\_and are permanently \_\_\_\_\_\_\_\_\_\_\_ your teeth.

4. Some people may only get one veneer in the case of a broken or , but many get\_\_\_\_\_\_\_\_\_\_\_\_ between six to eight veneers in order to create an \_\_\_\_\_\_\_\_\_\_\_\_, symmetrical smile.

5. The top front eight teeth are the most commonly \_\_\_\_\_\_\_\_\_\_\_\_\_\_veneers.

6. Once the veneer is ready, your dentist can \_\_\_\_\_\_\_\_\_\_\_ it on your prepared tooth and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it in place.

***IV. Complete the blanks with the verbs go, come, reach or get:***

1. \_\_\_\_\_\_ better 7. \_\_\_\_\_\_ to terms with

2. \_\_\_\_\_\_ dark 8. \_\_\_\_\_\_ to sleep

3.\_\_\_\_\_\_decision 9. \_\_\_\_\_\_ in handy

4. \_\_\_\_\_\_ rid of 10. \_\_\_\_\_\_ the sack

5. \_\_\_\_\_\_ lost 11. \_\_\_\_\_\_ down to business

6. \_\_\_\_\_\_ an agreement 12. \_\_\_\_\_\_ over the top

***V. Complete the blanks with prepositions:***

*Adjectives Nouns*

excellent \_\_\_\_\_ an answer \_\_\_\_\_\_

experienced \_\_\_\_\_ an expert \_\_\_\_\_\_

happy\_\_\_\_\_ smb (take) pride \_\_\_\_\_

happy \_\_\_\_\_\_smth a reply \_\_\_\_\_\_

proud \_\_\_\_\_ a report \_\_\_\_

respected \_\_\_\_\_ an opportunity \_\_\_\_\_

responsible \_\_\_\_\_\_ (feel) sympathy \_\_\_\_\_

***VI. Complete the sentences with the collocations/expressions in the box below:***

|  |
| --- |
| the other day all day long call it a day at times on time in time pass the time ahead of its time time and time again for the time being |

1.Despite technical problems, the flight left \_\_\_\_\_\_\_\_\_\_\_\_\_ .

2. We’ll be getting a new printer next month. So, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, we have to put up with this one.

3. Most engineers agreed that the car’s design was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

4. I started a conversation with the person sitting next to me on the bus to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

5. I saw Sally \_\_\_\_\_\_\_\_\_\_\_\_\_ . Did you know that she had broken her leg?

6. The match started at 6 p.m. and Jack arrived just \_\_\_\_\_\_\_\_\_\_\_\_ for the kick-off.

7. Let’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and go home. We’ve been working for over twelve hours without a break.

8. He keeps making the same mistake \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

9. I find it very difficult to agree with you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .Your views can sometimes be extreme.

10. I have been sleepy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ today. I don’t know what’s the matter with me.

**ABNORMALITIES OF THE TEETH**

***Active Vocabulary***

**environment** – оточення, навколишнє середовище

**bonding** – з’єднання, склеювання

**bud** – зародок, зачаток

**to inherit** – успадковувати

**exposure** – контакт, безпосередня дія, схильність до зовнішнього впливу

**to attribute** – стосуватися, класифікувати особливість

**to acquire** – набувати

**constriction** – звуження

**congenital** – вроджений

**sharp** – гострий, різкий

**failure** – недостатність, порушення, нездатність

**matrix** – матрикс, міжклітинний матеріал

**excess** – надлишок; надлишковий

**amount –** кількість

**phenomenon** (pl. phenomena) – явище, подія

**translucent** – напівпрозорий, що просвічує

***I.Read and translate the following words and word-combinations:***

Pathology, human life, environment, toxic chemicals, environmental factors, prenatal, postnatal, inherited, acquired, congenital absence, primary teeth, permanent teeth, excess number, standard number, the additional teeth, extra tooth, the complete bonding, irregular growth, locations, between roots, extra cusp, pulpal floor, mandibular canines, the junction, mostly, thickness of enamel, hardness of the enamel .

***II. Match the following English names of the diseases with the Ukrainian ones:***

1. hypercementosis a) гіпокальцифікація дентина

2. dentin dysplasia b) флюороз (хронічна інтоксикація фтором)

3. dentinogenesis imperfecta c) роздвоєння зуба

4. dentin hypocalcification d) гіперцементоз

5. enamel hypoplasia e) недосконалий дентиногенез (розвиток дентину)

6. enamel hypocalcification f) дисплазія дентина

7. amelogenesis imperfect g) зрощення зуба

8. dental fluorosis h) вузликове потовщення емалі, адамантома

9. germination i) гіпокальцифікація емалі

10. fusion j) «кіготь орла», додатковий горбик фронтальних зубів

11. concrescence k) гіперодонтія (надлишкова кількість зубів)

12. dilaceration l) гіпоплазія емалі

13. enamel pearl m) мікродентизм (малі розміри коронки зуба)

14. “talon cusp” n) недосконалий амелогенез (розвиток емалі)

15. taurodontism o) макродентизм (великі розміри коронки зуба)

16. supernumerary roots p) кутовий вигин зуба

17. microdontia q) адентія, анодентія (відсутність зубів)

18. macrodontia r) зрощення цементу зубів

19. anodontia s) гіподонтія (часткова відсутність зубів)

20. hypodontia t) надкомплектні корені

21. hyperdontia u) тауродонтизм

**III. Read and translate the following text:**

**Developmental abnormalities of teeth**

Tooth development or odontogenesis is the complex process by which teeth form from embryonic cells, grow, and erupt into the mouth. A developmental disturbance means an abnormality where the pathology starts in the embryonic stage of human life, before the formation of the dentition. The development of teeth is regulated by genes, but the genetic program is very sensitive to disturbances in the environment such as exposure to infection or toxic chemicals, including drugs. So, numerous genetic and environmental factors may cause abnormalities in tooth development.

Disorders of teeth development may be prenatal or postnatal in origin and may be inherited or acquired. All developmental abnormalities of teeth can be classified into:

* anomalies of number;
* anomalies of size;
* anomalies of shape;
* anomalies of structure;
* anomalies of colour.

**Anomalies of number** are represented by anodontia, hypodontia, hyperdontia.

*Anodontia* is a rare genetic disorder characterized by the congenital absence of all primary or permanent teeth.

*Hypodontia* is the condition at which the patient has missing teeth as a result of their failure to develop. Hypodontia describes a situation where the patient is missing up to 6 teeth, excluding the 3rd molars.

*Hyperdontia* is an oral condition characterized by having an excess number of teeth. The standard number of primary teeth is 20 and the standard number of permanent teeth is 32. A person who develops more than 20 primary teeth or more than 32 permanent teeth has hyperdontia. The additional teeth are referred to as supernumerary teeth.

**Anomalies of size** are represented by microdontia and macrodontia.

*Microdontia* is a condition in which the teeth appear smaller than normal teeth. Microdontia can occur on all teeth or just a few teeth.

*Macrodontia* is a condition in which the teeth appear larger than normal.

**Anomalies of shape** include germination, fusion, concrescence, dilacerations, enamel pearl, talon cusp, taurodontism, supernumerary roots.

Tooth *gemination* is a dental phenomenon when two teeth develop from one tooth bud and, as a result, the patient has an extra tooth, in contrast to fusion.

*Fusion* is a rare dental case characterized by the complete bonding of two adjacent teeth due to irregular growth.

*Concrescence* is a condition of teeth where the cementum overlying the roots of at least two teeth join together. The cause can sometimes be attributed to trauma or crowding of teeth.

*An* *enamel pearl* is a condition of teeth where enamel is found on locations where enamel is not supposed to be, such as on a root surface. They are found usually in the area between roots of molars. Enamel pearls are not common in teeth with a single root.

*A talon cu*sp, also known as an “eagle's talon”, is an extra cusp on an anterior tooth.

*Taurodontism* can be defined as a change in tooth shape characterized by an enlarged pulp chamber, apical displacement of the pulpal floor, and no constriction at the level of the cemento-enamel junction.

A *supernumerary root* is a condition found in teeth there may be a larger number of roots than expected. The most common teeth affected are mandibular canines, premolars, and molars, especially third molars.

*Dilaceration* is the anomaly in the tooth shape and its structure and it refers to a sharp bend in the tooth which can be in the crown portion or in the root, making sharp angles at the junction of the crown and root.

**Anomalies of structure** can be divided into disturbances in structure of enamel (enamel hypoplasia, enamel hypocalcification, amelogenesis imperfecta, dental fluorosis), dentin (dentin dysplasia, dentinogenesis imperfecta, dentin hypocalcification) and cementum (hypercementosis).

*Enamel hypoplasia* is the defect of the teeth in which the tooth enamel is hard but thin and deficient in amount. This is caused by defective enamel matrix formation with a deficiency in the cementing substance.

*Enamel hypocalcification* is a defect of tooth enamel in which normal amounts of enamel are produced but are hypomineralized. In this defect the enamel is softer than normal.

*Amelogenesis imperfecta* presents with abnormal formation of the enamel or external layer of teeth. Enamel is composed mostly of mineral, which is formed and regulated by the proteins in it. Amelogenesis imperfecta is due to the malfunction of the proteins in the enamel.

*Dental fluorosis* is a developmental disturbance of dental enamel caused by excessive exposure to high concentrations of fluoride during tooth development.

*Dentin dysplasia* is a genetic disorder of teeth characterized by presence of normal enamel but atypical dentin with abnormal pulpal morphology.

*Dentinogenesis imperfecta* is a genetic disorder of tooth development. This condition causes teeth to be discolored (most often a blue-gray or yellow-brown color) and translucent.

*Hypercementosis* is characterized by the excessive buildup of normal cementum on the roots of one or more teeth.

**Abnormal tooth colour** is any colour other than the white to yellowish-white of normal teeth. The change in color may affect the entire tooth, or just appear as spots or lines in the tooth enamel. Your genes influence your tooth colour. Other things that can affect tooth color include: congenital diseases, environmental factors, infections. Inherited diseases may affect the thickness of enamel or the calcium or protein content of the enamel, which can cause color changes. Metabolic diseases may cause changes in tooth colour and shape. Drugs and medications either taken by the mother while pregnant or by the child during the time of tooth development can cause changes in both the colour and hardness of the enamel.

***IV. Find in the text the equivalents for the following words and word-combinations:***

Формування зубного ряду, рідкісне генетичне захворювання, суміжні зуби, скупченість зубів, поверхня кореня, один корінь, більша кількість коренів, гострі кути, недостатня кількість, зовнішні шари зубів, зміни кольору.

***V. Answer the following questions:***

1. What is tooth development?

2. What are the causes of tooth development?

3. What categories can all developmental abnormalities of teeth be classified into? 4. What disease is characterized by the congenital absence of all teeth?

5. What is the difference between hypodontia and hyperdontia?

6. What is the difference between microdontia and macrodontia?

7. What anomalies of enamel structure can you name?

8. What is the difference between germination and fusion?

9. What factors can affect tooth colour?

***VI. Insert the missing prepositions (at, in, of):***

Disorders \_\_\_ development of teeth may be due to abnormalities \_\_\_ the differentiation of the dental lamina and the tooth germs, causing anomalies \_\_ the number, size, and form \_\_\_ teeth (abnormalities of morpho differentiation) or to abnormalities \_\_ the formation \_\_\_ the dental hard tissues resulting in disturbances \_\_\_ tooth structure (abnormalities of histodifferentiation). Abnormalities of histodifferentiation occur \_\_\_ a later stage in development than abnormalities of morpho differentiation; in some disorders both stages \_\_\_ differentiation are abnormal.

***VII. Insert the missing words given below:***

*disruption development cause enamel used pregnancy child deficiency dentin form*

A disruption during tooth \_\_\_\_\_\_\_\_ may affect the enamel. Generally such a \_\_\_\_\_\_\_\_\_\_ is referred to as hypoplasia (insufficient and/or irregular quantity of \_\_\_\_\_\_\_\_). Tetracycline can \_\_\_\_\_ enamel hypoplasia when taken during \_\_\_\_\_\_\_\_\_ or by an infant or young \_\_\_\_\_\_\_ during tooth development. Tetracycline should not be \_\_\_\_\_ during pregnancy or by children ages 8 and under. In addition, Vitamin D \_\_\_\_\_\_\_ during tooth development and calcification results in enamel and \_\_\_\_\_\_\_\_ hypoplasia. The enamel is poorly calcified and may fail to \_\_\_\_\_\_ at all in some areas.

**BRACES**

***Active Vocabulary***

**to straighten teeth –** вирівнювати зуби

**with regard to –** з точки зору, у відношенні до

**to correct underbites** – коригувати верхній глибокий прикус

**crooked teeth** – криві зуби

**flaws** – недоліки, дефекти

**drawback** – недоліки, мінуси

**severity** – складність

**stainless** – неіржавіючий

***I.Read and translate the text:***

Dental braces (also known as braces, orthodontic cases, or cases) are devices used in [orthodontics](https://en.wikipedia.org/wiki/Orthodontics) that align and straighten [teeth](https://en.wikipedia.org/wiki/Human_tooth) and help position them with regard to a person’s bite, while also aiming to improve dental health. They are often used to correct [underbites](https://en.wikipedia.org/wiki/Underbites), as well as [malocclusions](https://en.wikipedia.org/wiki/Malocclusion), [overbites](https://en.wikipedia.org/wiki/Overbite), open bites, gaps, [deep bites](https://en.wikipedia.org/wiki/Deep_bites), [cross bites](https://en.wikipedia.org/wiki/Cross_bites), crooked teeth, and various other flaws of the teeth and [jaw](https://en.wikipedia.org/wiki/Jaw). Braces can be either cosmetic or structural. Dental braces are often used in conjunction with other orthodontic appliances to help widen the [palate](https://en.wikipedia.org/wiki/Palate) or jaws and to otherwise assist in shaping the teeth and jaws.

There are several different types of braces. The type that’s best for you depends on a few factors, including the kind of issue you have, the severity of your condition and your personal preferences.

**Metal braces** use stainless bands, brackets and wires to gently shift your teeth over time. A dentist or orthodontist will bond (glue) a bracket on each tooth, then place a thin, flexible archwire over the brackets. Tiny elastic bands called ligatures keep wire firmly in place.

**Ceramic/Clear braces** work the same way as metal braces. The key difference is that the brackets, wires and ligatures are tooth-coloured, so they blend with your smile. Ceramic braces are still visible, but they’re less noticeable. One drawback to ceramic braces is that they’re more fragile than metal braces, so they’re more likely to break.

**Lingual braces** are similar to traditional braces. They go on the back surfaces of your teeth instead of the front. Most people who choose braces do so because they don’t want other people to be able to tell they have braces.

**Self-ligated braces** look similar to traditional metal braces. The main difference is that, instead of ligatures (tiny elastic bands), self-ligating braces use a built-in system to hold the archwire in place.

**Clear aligners/Invisible braces** are a braces alternative. Instead of brackets and wires, clear aligners used a series of custom-made trays to straighten your teeth over time. With these systems, you wear each set of aligner trays for approximately two weeks. Then you swap those trays out for the next set in the series. Unlike metal braces, clear aligners are removable. But you have to wear them for at least 22 hours every dy. You should only take your aligners out to eat, drink and brush your teeth.

There are some mild, expected side effects of braces, including:

* temporary discomfort (which usually occurs the first day and any time your dentist tightens your braces);
* irritation on your tongue, lips or inner cheeks;
* jaw pain;
* difficulty eating (especially after a tightening).

Proper oral hygiene is even more important when you wear braces. Plaque and tartar can build up around your brackets and wires, leading to cavities and gingivitis. Here are some general guidelines:

* brush your teeth at least twice a day using a soft-bristled toothbrush and fluoride toothpaste;
* floss between your teeth and around braces once a day;
* if you have clear aligners, clean then every day;
* swish with an alcohol-free, antibacterial mouthwash twice a day;
* avoid hard, crunchy or sticky foods;
* visit your dentist regularly for cleanings and routine dental care.

***II. Complete the blanks with the verbs miss or lose:***

1.\_\_\_\_\_\_\_ interest in 8.\_\_\_\_\_\_\_ one’s way

2. \_\_\_\_\_\_\_\_ a chance 9.\_\_\_\_\_\_\_\_ a train/plane etc.

3.\_\_\_\_\_\_\_\_\_ money 10. \_\_\_\_\_\_\_ a/your turn

4.\_\_\_\_\_\_\_\_\_ a person 11. \_\_\_\_\_\_\_ a competition

5. \_\_\_\_\_\_\_\_ weight 12. \_\_\_\_\_\_\_ one’s temper

6.\_\_\_\_\_\_\_\_ control over 13.\_\_\_\_\_\_\_\_ the target

7. \_\_\_\_\_\_\_\_ an opportunity 14. \_\_\_\_\_\_\_\_control (over)

***III. Complete the sentences with the collocations/expressions in the box below:***

|  |
| --- |
| out of the way under the way on the way way ahead one way or another there’s no way make our way to  have it your way come a long way way of thinking way of life |

1.”This job is going to be done\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,”said the manager in a determined voice.

2. I’m \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to Julie’s house. Will I see you there?

3. This school has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ since its first year in operation, when it only had twenty students.

4. We were asked to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the dining hall.

5. Can you please move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ? We want to move this big box.

6. Negotiations are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to buy a new striker, to improve the team’s chances.

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ our parents will let us go to the rock festival next weekend.

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, whose turn is it to wash the dishes?

9. Once you understand the lecture’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_, his theory becomes quite easy to follow.

10. Why must you always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ? It’s not fair.

11. Stop wasting your time in class, Michael. The rest of the class is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of you in Mathematics.

12. Teenagers tend to idolize film stars and imitate the way they look and their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

***IV. Read the sentences below. Complete the gaps with the verbs have or take and the blanks with prepositions:***

1. Twenty two countries \_\_\_\_\_\_\_\_\_ part \_\_\_\_ this year’s water polo tournament.

2. Every year \_\_\_\_\_\_\_\_\_ advantage \_\_\_\_ the Bank Holiday and spend a long weekend at a seaside resort.

3. They \_\_\_\_\_\_\_\_\_ no respect \_\_\_\_ their new teacher.

4, Before setting off on a fishing trip, you must \_\_\_\_\_\_\_ the weather conditions \_\_\_\_\_\_\_ account.

5. Do you \_\_\_\_\_\_\_\_ any idea \_\_\_\_\_ how to operate this contraption?

6. I \_\_\_\_\_\_\_\_\_ no intention \_\_\_\_\_\_\_ going back to school next year.

7. The children couldn’t \_\_\_\_\_\_\_\_ their eyes \_\_\_\_\_ the performing dolphins.

8. David had no option but to \_\_\_\_\_\_\_\_\_ responsibility \_\_\_\_\_ the company’s disastrous performance.

9. I \_\_\_\_\_\_\_ difficulty \_\_\_\_\_ deciding which school to go next year.

10. \_\_\_\_\_\_\_ no notice \_\_\_\_\_what she says. She’s always making up stories.

11. You need to \_\_\_\_\_\_\_\_\_ more confidence \_\_\_\_\_ yourself.

12. Now that I’m older, I \_\_\_\_\_\_\_ no interest \_\_\_\_\_ stamp collecting.

13. I am a pilot and I \_\_\_\_\_\_\_ a lot of pride \_\_\_\_ my work.

***V. Read the sentences and complete them with the correct form of the verbs say or tell:***

1.”\_\_\_\_\_\_\_ hello to John when you see him, will you?” said Camille as she waved goodbye.

2. The last thing she does before she lies down to sleep is \_\_\_\_\_\_\_\_\_ a prayer.

3. We could never \_\_\_\_\_\_\_ the difference between our cousins because they were identical twins.

4. My father still tells me to \_\_\_\_\_\_\_ thank you, and I’, forty years old!

5. It’s so hard nowadays for people to \_\_\_\_\_\_ the truth. Everyone is frightened of trusting each other.

6. Mr Grimes will begin by \_\_\_\_\_\_\_\_\_ a few words and then proceed to showing the slides.

7. “If I \_\_\_\_\_ you a story, will you go to sleep, then?” the mother asked her child.

8. My friends trusted me because I would never \_\_\_\_\_\_\_ anyone their secrets.

9. You should have \_\_\_\_\_\_\_ something. Now the police will suspect you.

10. Can Tom \_\_\_\_\_\_\_ the time or is he still too young for that?

11. The hardest thing he’s ever had to do was \_\_\_\_\_\_ sorry.

12. If she \_\_\_\_\_\_\_ so, then it must be the truth and we have to believe her.

**DENTAL IMPLANTS**

***Active Vocabulary***

**to interface** – взаємодіяти

**skull** – череп

**anchor** – анкор, якір

**osseointegration** – осеоінтеграція (кісткова вбудова)

**titanium** –титан

**zirconia** – цирконій

**abutment** – абатмент (примикання)

**stent –** стент

**prerequisites** – передумови, обов’язкові/необхідні умови

**adjacent teeth** – сусідні зуби

**sinus lift –** синус-ліфтинг

**gingival grafts** – ясенні трансплантати

**complications** – ускладнення

**zygomatic bone** – вилична кістка

**to taper** – звужуватися

**stumpy screw –** коренастий гвинт

**to snap** – застібатися

***I. Read and translate the text:***

A **dental implant** (also known as an **endosseous implant** or **fixture**) is a [prosthesis](https://en.wikipedia.org/wiki/Prosthesis) that interfaces with the bone of the jaw or skull to support a [dental prosthesis](https://en.wikipedia.org/wiki/Dental_prosthesis) such as a [crown](https://en.wikipedia.org/wiki/Crown_(dentistry)), [bridge](https://en.wikipedia.org/wiki/Bridge_(dentistry)), [denture](https://en.wikipedia.org/wiki/Dentures), or facial prosthesis or to act as an [orthodontic anchor](https://en.wikipedia.org/wiki/Dental_braces). The basis for modern dental implants is a biological process called [osseointegration](https://en.wikipedia.org/wiki/Osseointegration), in which materials such as [titanium](https://en.wikipedia.org/wiki/Titanium) or [zirconia](https://en.wikipedia.org/wiki/Zirconium_dioxide) form an intimate bond to the bone. The implant fixture is first placed so that it is likely to osseointegrate, then a dental prosthetic is added. A variable amount of healing time is required for osseointegration before either the dental prosthetic (a tooth, bridge, or denture) is attached to the implant or an [abutment](https://en.wikipedia.org/wiki/Abutment_(dentistry)) is placed which will hold a dental prosthetic/crown.

Success or failure of implants depends primarily on the thickness and health of the bone and gingival tissues that surround the implant, but also on the health of the person receiving the treatment and drugs which affect the chances of osseointegration. The amount of [stress](https://en.wikipedia.org/wiki/Stress_(mechanics)) that will be put on the implant and fixture during normal function is also evaluated. Planning the position and number of implants is key to the long-term health of the prosthetic since [biomechanical](https://en.wikipedia.org/wiki/Biomechanics) forces created during [chewing](https://en.wikipedia.org/wiki/Mastication) can be significant. The position of implants is determined by the position and angle of adjacent teeth, by lab simulations or by using [computed tomography](https://en.wikipedia.org/wiki/Computed_tomography) with [CAD/CAM](https://en.wikipedia.org/wiki/CAD/CAM) simulations and surgical guides called [stents](https://en.wikipedia.org/wiki/Stent). The prerequisites for long-term success of osseointegrated dental implants are healthy [bone](https://en.wikipedia.org/wiki/Bone) and [gingiva](https://en.wikipedia.org/wiki/Gingiva). Since both can [atrophy](https://en.wikipedia.org/wiki/Atrophy) after [tooth extraction](https://en.wikipedia.org/wiki/Tooth_extraction), pre-prosthetic procedures such as [sinus lifts](https://en.wikipedia.org/wiki/Sinus_lift) or [gingival grafts](https://en.wikipedia.org/wiki/Gingival_graft) are sometimes required to recreate ideal bone and gingiva.

The final prosthetic can be either fixed, where a person cannot remove the denture or teeth from their mouth, or removable, where they can remove the prosthetic. In each case an abutment is attached to the implant fixture. Where the prosthetic is fixed, the crown, bridge or denture is fixed to the abutment either with [lag screws](https://en.wikipedia.org/wiki/Lag_screw) or with [dental cement](https://en.wikipedia.org/wiki/Dental_cement). Where the prosthetic is removable, a corresponding adapter is placed in the prosthetic so that the two pieces can be secured together.

The risks and complications related to implant therapy divide into those that occur during surgery (such as excessive bleeding or nerve injury, inadequate primary stability), those that occur in the first six months (such as infection and failure to osseointegrate) and those that occur long-term (such as [peri-implantitis](https://en.wikipedia.org/wiki/Peri-implantitis) and mechanical failures). In the presence of healthy tissues, a well-integrated implant with appropriate biomechanical loads can have 5-year plus survival rates from 93 to 98 percent and 10 to 15 year lifespans for the prosthetic teeth. Long-term studies show a 16- to 20-year success (implants surviving without complications or revisions) between 52% and 76%, with complications occurring up to 48% of the time. Artificial intelligence is relevant as the basis for clinical decision support systems at the present time. Intelligent systems are used as an aid in determining the success rate of implants.

The primary use of dental implants is to support [dental prosthetics](https://en.wikipedia.org/wiki/Dental_prosthesis) (i.e. false teeth). Modern dental implants, the biologic process where bone fuses tightly to the surface of specific materials such as titanium and some ceramics. The integration of implant and bone can support physical loads for decades without failure.

Dental implants are also used in [orthodontics](https://en.wikipedia.org/wiki/Orthodontics) to provide [anchorage](https://en.wikipedia.org/wiki/Anchorage_(orthodontics)) (orthodontic mini implants). Orthodontic treatment might be required prior to placing a dental implant.

In the simplest sense, dental implants are composed of three main parts: the fixture, the abutment, and the dental prosthetic. Now, let’s take a deeper look at each component to learn more about how these components work together.

**Fixture**

The fixture, also sometimes called an implant post, is a small, cylindrical screw that is implanted into the jawbone to act as an artificial tooth root. Since the fixture is designed to mimic the function of natural tooth roots, it is designed to taper at the base like a natural tooth root. Implant posts are also made out of titanium due to its [biocompatibility](https://en.wikipedia.org/wiki/Titanium_biocompatibility). In some cases, they are also coated with hydroxyapatite, which helps the implant post fuse with the surrounding bone.

Dental implant fixtures are also available in different sizes, depending on the tooth or teeth being replaced. For example, an incisor may use a narrow or mini dental implant post, while a molar will generally require an implant post with a larger diameter. In some cases, your implant dentist may also recommend using zygomatic implant fixtures. These are specialized implant fixtures that are longer than traditional implant fixtures and are implanted into the jawbone and zygomatic bones. They are often used when there is a lack of adequate bone mass in the jawbone alone.

Out of all the options for replacing missing teeth, dental implants are the only restoration with a component that functions like natural tooth roots. After the implant post is placed into the jawbone, it will fuse with the surrounding bone in a process called osseointegration. Once the implant post has fused, it will function almost exactly as a natural tooth root would, allowing for natural chewing function, as well as a natural appearance.

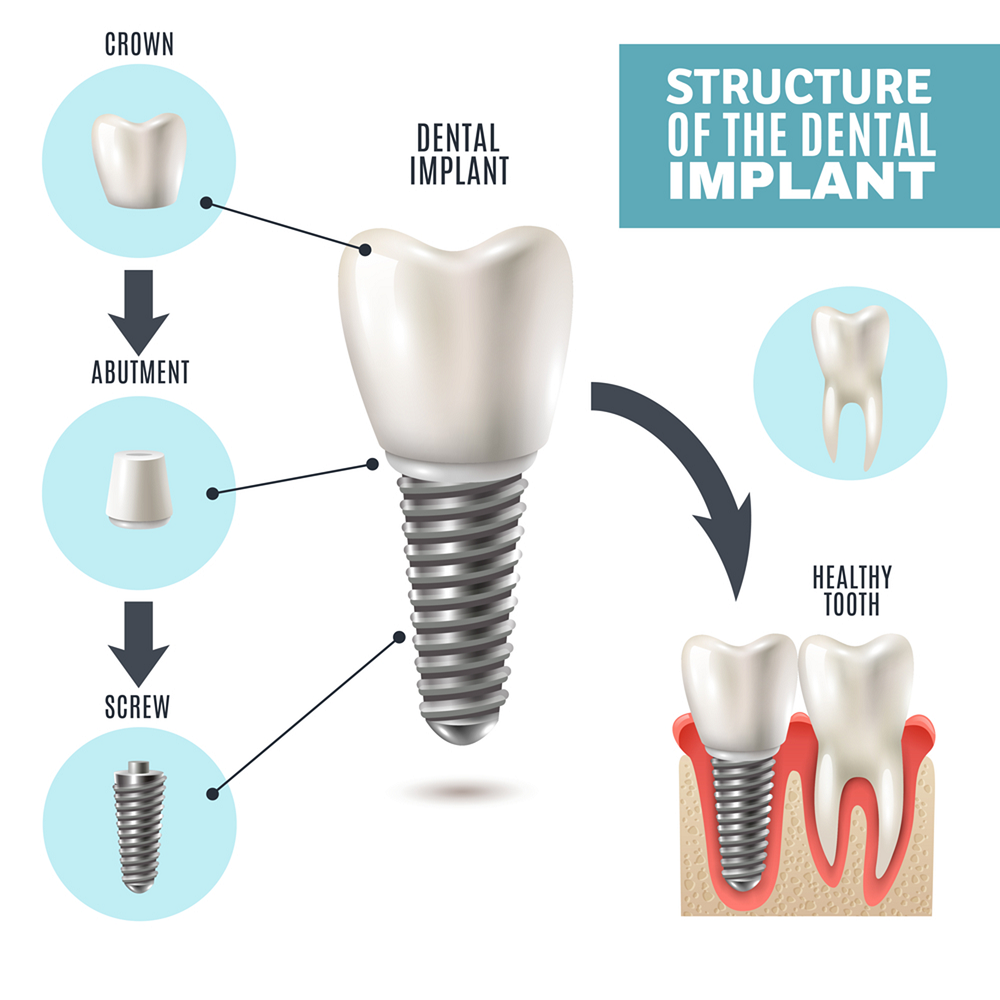
**Abutment**

The abutment is a small connector piece that sits between the implant post and the prosthetic. One side is designed to screw into the inside of the implant post, while the other side is used to adhere a dental prosthetic. There are different types of abutments that may be used depending on the type of prosthetic that needs to be supported. For example, a dental crown may simply look like a stumpy screw, while an abutment used for an implant-supported denture may have special attachments that can clip onto the denture. Some abutments can also be placed at different angles to ensure a natural appearance once the prosthetic is attached. Depending on the technique used by your implant dentist, the abutment may be placed at the same time as the implant post or it may be screwed into the post after osseointegration has occurred.

**Dental Prosthetic**

The dental prosthetic is the visible portion of the dental implant that can either be a dental crown, bridge, or denture. Dental crowns are generally used to replace a single tooth or multiple missing teeth that are not adjacent to one another, while dental bridges are generally used to replace two or more missing teeth that are adjacent to each other. Finally, dentures are used to replace an entire arch of missing teeth, as well as an entire mouthful of missing teeth. If a crown or bridge is being placed, then your dentist will likely cement the restoration to the abutment. However, if a denture is being placed it will likely be snapped onto the abutments.

The prosthetic you plan on using will also affect the number of implant posts that need to be placed. For example, dental crowns require one implant post, dental bridges may require two or more implant posts, and dentures generally require 4-6 implant posts. Ultimately, your implant dentist will advise you on how many implant posts should be placed in order to safely support your chosen prosthetic.



***II. Discuss advantages and disadvantages of dental implants which are given below:***

***Advantages of Dental Implants***

* [Dental implants](https://pacificperio.com.au/treatments/dental-implants/) can last a lifetime if taken proper care of. Unlike dentures, they generally do not need to be replaced after a certain amount of time.
* Dental bridges rely on neighbouring teeth for support, whereas dental implants are fused into your jawbone. This protects your remaining teeth from damage or strain.
* Caring for dental implants is generally quite easy as you would practice the same oral care as you would for your normal teeth. This entails brushing, flossing and regular dental visits.
* Implants look and function like real teeth, with no clicking noises or speaking and chewing difficulties that can occur with dentures.

***Disadvantages of Dental Implants***

* The dental implant procedure cannot always be completed within one appointment. Waiting for the actual implant to fuse with your jawbone can take a certain amount of time. During this time, a temporary tooth will be placed over the area.
* Implants require a certain volume and density of bone. Many patients require additional bone augmentation. Fortunately bone augmentation techniques have become less invasive and less painful in recent years. Occasionally some patients are not suitable.
* Dental implants are a surgical procedure and although it is considered safe, complications cannot be ruled out. Risks include infection, nerve injuries or bleeding. Factors such as poor hygiene and smoking can increase your risks of infections.

***III. Use the correct form of the words given below to complete the sentences. You may use some of the words more than once:***

***like alike unlike as same similar common***

1.It’s very \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to see people asleep on the train when travelling to work. When I’m tired I do the \_\_\_\_\_\_\_\_\_\_\_.

2. My cousin John looks \_\_\_\_\_\_\_\_\_\_\_\_ his father. They even have \_\_\_\_\_\_\_\_\_\_ habits.

3. Jonathan is very polite \_\_\_\_\_\_\_\_\_\_ his brother who is really rude.

4. Dora and Mary look \_\_\_\_\_\_\_\_\_\_\_ and often I can’t tell one from the other.

5. He’s as white ……………a ghost. It’s very …………… that he is going to faint.

6. They are \_\_\_\_\_\_\_\_\_\_ to be late, so let’s start eating dinner.

***suit fit match combine compare***

1.You must \_\_\_\_\_\_\_\_\_\_\_\_\_ strength with will-power to become a successful weightlifter.

2. The red tie doesn’t \_\_\_\_\_\_\_\_\_\_ you and it doesn’t \_\_\_\_\_\_\_\_\_ your clothes either.

3. My trainers are too small and don’t \_\_\_\_\_\_\_\_\_\_me anymore

4. You can’t \_\_\_\_\_\_\_\_\_\_\_ a Ferrari to an ordinary car.

***punctual accurate correct exact sharp***

1.The \_\_\_\_\_\_\_\_\_\_\_\_ answer to the maths problem is 2.43 not 2.53.

2. Be here at 8 o’clock \_\_\_\_\_\_\_\_\_\_\_, otherwise I’ll leave without you.

3. Barometers are the most \_\_\_\_\_\_\_\_\_\_\_\_ way of measuring atmospheric pressure.

4. Jason is a very \_\_\_\_\_\_\_\_\_\_\_ person. He is never late.

5. The \_\_\_\_\_\_\_\_\_\_\_\_ distance from Burwood to the city centre is 17.4 km.

***IV. Complete the sentences/paragraphs with the sentence linkers in the box below:***

|  |
| --- |
| furthermore what is more nevertheless not only yet likewise besides otherwise to be more specific to tell you the truth similarly |

1.The students are not happy with their new English teacher. \_\_\_\_\_\_\_\_\_\_\_\_ does he assign them a lot of homework, but he is also very critical of their work.

2. I felt like complaining to the airport authorities the other day. Our flight was delayed for an unknown reason. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the airline didn’t bother to apologize for the inconvenience. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the airline representative I askes was of no help, if not rude. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I managed to stay calm and get the information I needed.

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I don’t think Adam is very good at his job. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, he is slow and not very creative.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, he believes that he is the backbone of the company. He is so annoying!\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I would not have a problem telling him a thing or two.

4. If you change address notify me. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, do so if your phone number changes.

5. Reading books in a foreign language helps you expand your vocabulary. \_\_\_\_\_\_\_\_\_\_\_\_\_\_, watching films help you get used to the pronunciation.

***V. Read the sentences and complete them with prepositions in, on, at, by, under or to:***

1. You’ll find a fairly detailed map of the town \_\_\_\_\_ page 40 of this guide.

2. \_\_\_\_\_ my parent’s surprise I passed all my exams.

3. \_\_\_\_\_the circumstances, the police officer had no other choice but to arrest him.

4. What’s \_\_\_\_\_ your mind, Geoffrey? You look rather worried.

5. I promise to be \_\_\_\_\_ by your side no matter what happens.

6. You look so calm and \_\_\_\_\_ ease with yourself.

7. \_\_\_\_\_ sum up, this book is a good read and I definitely recommend it.

8. I made several attempts to convince her, but \_\_\_\_\_ vain.

9. I was \_\_\_\_\_ the impression you knew how to operate the video camera.

10. Their willingness to employ me immediately without another interview took me \_\_\_\_\_ surprise.

11. \_\_\_\_\_ a certain extent, your anger is understandable.

**ORAL SURGERY**

***Active Vocabulary***

**gum grafts** – ясенні трансплантати

**maxillofacial surgeon** – щелепно-лицевий хірург

**extensive tooth decay** – обширний зубний карієс/гниття зуба

**broken teeth** – зламані/вибиті зуби

**impacted teeth** – ретиновані зуби (зуби, як не в змозі прорізатися належним чином, оскільки повністю або частково закриті кісткою чи частиною ясен)

**sleep apnea** – зупинка дихання під час сну

**benign oral pathology** – незлоякісна патологія ротової порожнини

**lump, bump** – пухлини

**cleft lip** – заяча губа

**cleft palate** – вовча паща

**nutrients** – поживні речовини

**density** – щільність

**gum recession** – рецесія ясен (прогресуюче зміщення ясенного краю в напрямку верхівки кореня, яке супроводжується оголенням поверхні кореня або імплантата)

**plaque** – наліт

***I.Read and translate the text:***

Oral surgery refers to any surgical procedure performed on your teeth, gums, jaws or other oral structures. This includes extractions, implants, gum grafts and jaw surgeries. Oral surgery is usually performed by an oral and maxillofacial surgeon or a periodontist.

You need oral surgery for a number of reasons. Your dentist might recommend or if you have:

* extensive tooth decay;
* badly broken teeth
* gum disease;
* impacted teeth
* missing teeth
* temporomandibular joint disorder (TMD);
* bone loss in your jaw;
* sleep apnea;
* oral cancer;
* benign oral pathology (noncancerous lumps or bumps).

There are several types of oral surgery procedures performed each year. Some of the most common include tooth extractions, dental bone grafts, dental implants, periodontal surgery, corrective jaw surgery, sleep apnea surgery and cleft lip and palate repair.

***Tooth extraction***

The most common type of oral surgery is tooth extraction (tooth removal). An extraction, might be recommended if you have severe tooth decay, gum diseases (periodontitis), dental trauma or wisdom teeth complications. Sometimes tooth extractions are performed to prepare you for dentures or other prosthetic devices. Most dentists prefer to save natural teeth when possible, but sometimes extractions are necessary to preserve your overall oral health. Additionally, many dentists recommend wisdom tooth extraction as a preventive measure to reduce the risk for cavities, bone loss and other problems.

***Dental bone draft***

A dental bone draft is necessary when bone loss has occurred in the jaw. There are a couple of reasons why this may occur. When your natural teeth are present, the roots stimulate the nerves in your jaw. This signals your brain to send nutrients to your jaw, keeping it strong and healthy. If a tooth has been missing for some time, bone deterioration can occur in that area because there are no roots to stimulate the nerves. A dental bone graft restores volume and density in your jawbone so that dental implants can be place later on. Sometimes, a bone graft might be placed during a periodontal surgery. Advanced gum disease can cause the bone around your teeth to erode. A bone graft reduces mobility and provides a solid foundation, keeping your teeth strong and healthy.

***Dental implants***

Dental implants are widely considered the most reliable and longest-lasting teeth replacement option available. These small threadlike posts – made of medical-grade titanium or zirconia – are embedded into your jaw to replace missing teeth roots. Once the implants are healed, they can be restores with dental crowns, dental bridges or dentures.

***Periodontal surgery***

If you have moderate or severe periodontitis, a gum specialist may recommend gum disease treatment. During this procedure, incisions are made along your gum line and the tissue is temporarily moved back away from your teeth, your surgeon will then clean your teeth roots, flushing away plaque and bacteria that have accumulated under your gums. Finally, the gum disease is repositioned and sutured into place. Sometimes, gum recession can occur as a result of periodontitis. In these instances, you may need a gum graft. During this procedure, your surgeon reinforces the area of tissue loss with donor tissue. This tissue may be taken from the roof of your mouth or purchased at a certified bank.

***Corrective jaw surgery***

Corrective jaw surgery (orthognathic surgery) addresses skeletal abnormalities of your jaw bones. This procedure may be recommended to improve chewing function, correct misalignment or address facial imbalances.

***Sleep apnea surgery***

Obstructive sleep apnea (OSA) occurs when the tissue in the back of your throat fall back and block your airway during sleep. Sometimes OSA is successfully treated with conservative methods, such as oral appliance therapy or using CPAP machine. However, severe cases may require surgical intervention.

***Cleft lip and palate repair***

A baby born with cleft lip has an opening in their upper lip, while a baby born with a cleft palate has an opening in the roof of their mouth. Some babies are born with both conditions. Cleft lip and palate occur when the facial structures don’t fully develop in the uterus. Oral and maxillofacial surgeons commonly perform cleft lip and palate repair to restore normal eating function and help a child develop proper speech patterns later on life.

***II. Match the term for dental diseases with its definition:***

|  |  |
| --- | --- |
| **Term** | **Definition** |
| 1) Pulpitis | a) is a collection of pus that forms inside the teeth or gums. |
| 2) Periodontitis | b) is an inflammation of the gum tissues. |
| 3) Oral leukoplakia | c) is a chronic disease caused by excessive intake of fluoride. |
| 4) Halitosis | d) is a precancerous lesion of oral mucosa. |
| 5) Dental caries | e) is an inflammation of the pulp. |
| 6) Pulp necrosis | f) is a progressive destruction of the alveolar processes. |
| 7) Dental fluorosis | g) is a fungal infection of oral mucosa. |
| 8) Dental abscess | h) is a progressive destruction of the hard tissues of the teeth. |
| 9) Gingivitis | i) is a death of pulp tissue. |
| 10) Oral candidiasis | j) is a persistent bad breath. |

***III. Fill in the table with the names for different types of dental disease:***

|  |
| --- |
| tooth decay, pulpitis, oral candidiasis, hypoplasia, paradontoma, acid necrosis, dental caries, tooth loss, periodontitis, nicotinic stomatitis, gingivitis, paradontosis, oral cancer, fluorosis, tooth erosion, dental abscess, oral leukoplakia, smoker’s melanosis |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Noncarious lesions*** | ***Dental caries*** | ***Carious complications*** | ***Periodontal diseases*** | ***Diseases of oral mucous membrane*** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

***IV. Fill in the table with relevant dental terms. The first line has been filled for you as a model. Translate and explain each term:***

|  |
| --- |
| difficult chewing, thick white deposit on the tongue, infraorbital anesthesia, dental examination, bleeding, slight loosening of teeth, microscopic examination of the pulp, bleeding gums, halitosis, dental fillings, root canal treatment, exposure of tooth necks, dry mouth, examination of a biopsy sample, lockjaw, radiography, dental surgery, ataralgesia, restoration with artificial crowns, taste sensitivity disorder |

|  |  |
| --- | --- |
| ***Dental procedures*** | ***Patient’s complaints*** |
| *tooth extraction* | *painful sensation* |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**DENTAL INSTUMENTS**

***Active Vocabulary***

**to carve** – висікати, вирізати

**stainless steel** – нержавіюча сталь

**carbon steel** – вуглецева сталь

**to withstand –** витримувати, протистояти

**dental tray** – зубний лоток

**cotton forceps** – ватні щипці (пінцет)

**mouth mirror** – ротове дзеркальце

**periodontal probe** – періодонтальний зонд

**straight probe** – прямий зонд

**chisel** – долото, зубило

**gingival margin trimmer** – тример ясенного краю

**hand piece** – наконечник

**hoe** – мотика, сапка

**hatchet** – топірець

**scalar** – скейлер

**scissors** – ножиці

**spatula** – лопатка, шпатель

**syringe** – шприц

***I.Read and translate the text:***

Each dental hand instrument has a defined use in a dental procedure.  The dental assistant is responsible for knowing what each dental hand instrument does and which one the dentist will need during a procedure. Most dental hand instruments are used to examine the mouth and teeth, to professionally clean the teeth, to cut the teeth or remove cavities, to place filling materials, and to carve dental fillings. Most dental hand instruments are made of stainless steel, carbon steel, or plastic and must be strong enough to withstand constant use and sterilization procedures.

The dental assistant should set up the dental hand instruments on a tray in order of use in part to not delay the procedure. A procedure tray is set up from left to right. The dental assistant will use their left hand to transfer instruments to the dentist.

Many manufacturers assign a universal part number to most instruments and the dentist will often refer to the number rather than the name of the instrument. A dental assistant will want to learn the number and name of all dental hand instruments. Most dental hand instruments fall into ***four categories***, they include examination instruments, hand cutting instruments, restorative instruments and instrument accessories.

**Examination Instruments**

Examination instruments are the most often used instruments on the dental tray. They allow the dentist, dental hygienist or dental assistant to thoroughly examine the patient’s mouth. These instruments include the Briault probe, cotton forceps, explorers, mouth mirror, periodontal probe and straight probe.

* **Briault probe** – used to detect the junction between the enamel and dentine.
* **Cotton forceps** – used to manipulate small objects including cotton pellets, gingival retraction cord, matrix bands, and wedges.
* **Explorers**– used to detect decay in the tooth’s surface. If the explorer sticks in the surface of the tooth, the tooth may have some decay that needs to be removed.
* **Mouth mirror** – used in the mouth to view the oral cavity, reflect light and retract the cheek.
* **Periodontal probe** – used to measure the pocket depth of the gums around each tooth. A healthy gum will have less than 2 mm of pocket depth.
* **Straight probe** – used to examine cavities in the dentine region and to check the margins of fillings.

**Hand Cutting Instruments**

Hand cutting instruments allow the dentist, dental hygienist or dental assistant to remove decay manually from teeth for final restoration. The hand cutting instruments include the chisel, excavator, elevator, gingival margin trimmer, hand piece, hoe, hatchet, scalar, and Wilson.

* **Chisel**– used to break down the enamel margin of the tooth preparation, to form sharp lines and point angles, and to place retention grooves.
* **Excavator**– used to remove soft dentin, debris and decay from the tooth.
* **Elevators**– used to extract a tooth from the mouth
* **Gingival margin trimmer** – used to cut enamel and to place bevels along the gingival enamel margins of the preparation.
* **Hand piece**– also known as a dental drill. Used to eliminate decay, prepare a tooth for a crown and to reconstruct the surface of a tooth after the bonding process.
* **Hoe** – used to prepare the tooth and to plane the walls and floors of the tooth preparation.
* **Hatchet**– used to cut enamel and to smooth the walls and floors of the tooth preparation.
* **Scalar**– used to scrape solidified plaque and tarter off the surface of the teeth.
* **Wilson**– used to pry back the gum tissue when performing an extraction.

**Restorative Instruments**

Restorative instruments are used by the dentist or dental assistant to restore a tooth by placing, condensing and carving a dental material to the tooth structure. Restorative dental hand instruments include the amalgam carrier, burnisher, condensers, composite placement instruments, carvers, and Woodsen.

* **Amalgam Carrier** – used to carry an increment of amalgam directly into the prepared tooth.
* **Burnisher** – used to smooth the surface of a freshly placed amalgam restoration.
* **Condensers**– used to pack down freshly placed amalgam into the preparation.
* **Composite placement instrument** – used for the placement of composite restorative materials.
* **Carvers**– used to remove excess material, to contour surfaces, and to carve anatomy back into the amalgam.
* **Woodson**– used for carrying dental materials to the prepared tooth structure.

**Dental Hand Instrument Accessories**

Accessory instruments are miscellaneous parts and instruments that are used to complete a procedure. Some of the additional accessory instruments include air and water tips, amalgam well, articulating paper holder, Howe pliers, mouth prop, retractors, scissors, spatula, syringe and Willis gauge.

* **Air and water tips**– the dental assistant will use to blow air or squirt water to remove debris from the mouth during a dental procedure or cleaning.
* **Amalgam well** – used to transfer the newly mixed amalgam to transfer to the dentist.
* **Articulating paper holder** – used to hold and carry articulating paper to the mouth. Helps check a patient’s bite following the placement of a new restoration, crown, bridge or denture.
* **Howe pliers** – also known as 110 pliers, they are used to carry cotton products, for removing matrix bands and for manipulation of a wedge.
* **Mouth prop**– a wedge-shaped bite block used by the dentist for patients that have a difficulty keeping their mouths open wide during a procedure.
* **Retractors –**used to retract the cheek, tongue and lips to better view the teeth during a dental procedure.
* **Scissors**– used for cutting dental dam material, retraction cord, and stainless steel crowns.
* **Spatula**– used to mix liners, bases, and cements.
* **Syringe**– used to inject analgesic to the gums surrounding the teeth that will be worked on and allow the patient to not feel pain during the procedure.
* **Willis gauge**– used to measure the vertical dimensions during patient assessment prior to denture construction.

***II. Complete the collocations below with the adjectives in box. You may use some of the adjectives more than once. In some cases more than one adjective may be correct:***

|  |
| --- |
| long secret heavy sore wide weak short common light fatal close strong |

1. a\_\_\_\_\_\_\_\_\_ friend 13. a\_\_\_\_\_\_\_\_\_ schedule

2. a\_\_\_\_\_\_\_\_\_ accident 14. a\_\_\_\_\_\_\_\_\_ relationship

3. a\_\_\_\_\_\_\_\_\_ throat 15. a\_\_\_\_\_\_\_\_\_ sight

4. a\_\_\_\_\_\_\_\_\_ rule 16. a\_\_\_\_\_\_\_\_\_ relative

5. a\_\_\_\_\_\_\_\_\_ journey 17. a\_\_\_\_\_\_\_\_\_ influence

6. a\_\_\_\_\_\_\_\_\_ agent 18. a\_\_\_\_\_\_\_\_\_ rain

7. a\_\_\_\_\_\_\_\_\_ argument 19. a\_\_\_\_\_\_\_\_\_ sense

8. a\_\_\_\_\_\_\_\_\_ meal 20. a\_\_\_\_\_\_\_\_\_ coffee

9. a\_\_\_\_\_\_\_\_\_ mistake 21. a\_\_\_\_\_\_\_\_\_ knowledge

10. a\_\_\_\_\_\_\_\_\_ colour 22. a\_\_\_\_\_\_\_\_\_ traffic

11. a\_\_\_\_\_\_\_\_\_ time 23. a\_\_\_\_\_\_\_\_\_ eyesight

12. a\_\_\_\_\_\_\_\_\_ personality 24 a\_\_\_\_\_\_\_\_\_ story

***III. Complete the sentences with the expressions in the box below:***

|  |
| --- |
| all of a sudden all in all all over after all not at all once and for all all the same |

1.The child split the mild \_\_\_\_\_\_\_\_\_\_\_ the expensive rug.

2. I don’t care where go on holiday. Majorca, Ibiza, they’re \_\_\_\_\_\_\_\_\_\_\_\_ to me.

3. The old train was making good progress, when \_\_\_\_\_\_\_\_\_\_\_\_\_ a loud clank was heard and it grinded to a halt.

4. Janet expected to get a high mark on her project. \_\_\_\_\_\_\_\_\_\_\_\_\_\_, she had worked very hard.

5. This argument has been going on for far too ling. Let me settle it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

6. Most members of the school committee believed that \_\_\_\_\_\_\_\_\_\_\_\_\_ the fete was a great success.

7. “Is my request too demanding?” asked the customer. “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,” replied the salesperson.

***IV. Write so, such, too or enough in each gap:***

1.It was \_\_\_\_\_\_\_\_\_ good a meal that we left the waiter quite a large tip.

2. It’s becoming increasingly clear that there just aren’t \_\_\_\_\_\_\_\_\_ people willing to buy our products online.

3. I’m quite enjoying my maths degree but I just find statistics \_\_\_\_\_\_\_\_\_ boring.

4. Angela seemed to be having \_\_\_\_\_\_\_\_\_ a good time at the party that I decided not to tell her how late it was.

5. We’ve all been working \_\_\_\_\_\_\_\_\_ hard on the latest project the manager gave us a couple of extra days off.

6. I worry about my grandparents because they have \_\_\_\_\_\_\_\_\_ a lot of health problems.

7. It’s \_\_\_\_\_\_\_\_\_ early to tell whether the business is going to succeed or not.

8. Set the alarm or we’ll never wake up early \_\_\_\_\_\_\_\_\_ to catch the first train.

9. I never knew that Andrew had \_\_\_\_\_\_\_\_\_ few friends.

10. Everyone was surprised when Dan failed because he’s \_\_\_\_\_\_\_\_\_a good student.

11. A year after losing my job, I had \_\_\_\_\_\_\_\_\_ many debts that I was really beginning to panic.

12. I was hoping to have a word with Alan before he left, but it seems to be \_\_\_\_\_\_\_\_\_ late now.

***V. Circle the correct word:***

**1.** Tim looks really pale and **thin/slim**. I’m worried he might be ill.

**2.** It is important to eat a **fit/healthy** diet with lots of vegetables.

**3.** After picking the flowers, I noticed I had a **fever/rash** all over my hands.

**4.** When I broke a rib, I had to wear a **bandage/plaster** around my chest.

**5.** Make sure you wash your cut properly so that you don’t get a/an **infection/pollution**.

**6.** Half an hour after taking the pill, I began to feel the **results/effects**.

**7.** The doctor walked along the **ward/clinic**, chatting to all the patients she passed.

**8.** Two people have been slightly **injured/damaged** in the accident on the M1.

**9.** It is good for children to get minor **diseases/illnesses**, such as colds.

**10.** The medicine bottle said the recommended **dose/fix** was two teaspoons twice a day.

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