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Natural mineral waters in the Service therapy at patients with COPD and gastrointestinal comorbidity

HAYSAK Margarita O., DYCHKA Lyudmila V., LYAKHOVA Oksana B.
Government Institution "The Scientific-practical Medical Centre "Rehabilitation" Health Ministry of Ukraine", Uzhgorod, Ukraine, e-mail: rehab_uzh@ukr.net

Editor: Constantin MUNTEANU, E-mail: office@bioclima.ro

Abstract

Introduction. There is consistent evidence that comorbidities have a great negative impact in COPD patients. In clinical practice, there is a frequent combination of COPD with pathology of the digestive system. In addition to traditional pharmacological therapy, management of COPD requires a more holistic approach, including the assessment and appropriate treatment of comorbid conditions.

Materials and methods. We examined 23 patients with mild and moderate COPD beyond exacerbation period. Among them - 15 men and 8 women. The age of patients ranged from 43 to 69 years (average 56.9±1.4 years). The complex examination of patients included clinical, biochemical and ultrasonic examination.

Results. Digestive pathology was observed in most patients with COPD, due to common pathophysiological mechanisms and long-term drug treatment, and manifested mainly by chronic gastroduodenal pathology and hepatobiliary diseases. Hepatic transaminases levels were elevated in 56,5% of patients, exceeding the upper reference limit by 64%. Cardiac transaminase was higher than the normal levels by 25,8% in 39,1% of respondents. The ratio of transaminases was below normal in 74.9% of patients, which may indicate a decrease in liver detoxification activity. The predominance of pancreatic hyposecretion, which was associated with a relatively high frequency of elevated blood glucose in 43,5% of subjects, which can be considered as a possible mechanism of insulin resistance and pancreatogenic diabetes mellitus formation in COPD patients.

These disturbances manifested by functional and structural changes – hypotonic gallbladder (57,8 %), presence of hyperechogenic sediment, sludge, stones in its cavity (47,4%), signs of hepatic steatosis, reactive pancreatitis.

Conclusions. The obtained data determine the expediency of supplementing the complex treatment for COPD with drinking natural mineral waters, which have systemic alkalizing features, choleretic and cholekinetic effects – mineral waters of medium and low mineralization and different balneological groups with the presence in their composition bicarbonates, sulfates, silicic acid, boron.