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PREVALENCE OF RISK FACTORS OF OSTEOPOROSIS DEVELOPMENT IN PATIENTS WITH GASTROINTESTINAL DISEASES

Background. Osteoporosis (OP) is one of the common long-term complications of a number of diseases of the gastrointestinal (GI) tract. The development of OP is promoted by chronic inflammation and impaired calcium/phosphorus absorption. Comorbidity OP with GI diseases is associated with an increased risk of pathological fractures. Therefore, the timely identification patients with risk factors of OP development in case of pathology of the GI tract is very important.

Aim. To establish and analyze the risk factors for the OP development and the 10year probability of developing osteoporotic fractures in patients with chronic GI diseases.

Materials and methods. 30 patients of the Kharkiv Regional Gastroenterological Department were conducted. All patients were divided into 3 groups, containing 10 patients, depending on the main pathology: intestine, stomach or hepatobiliary system. Detection of OP risk factors was performed using the FRAX® tool. The following clinical risk factors were evaluated: body mass index (BMI), smoking, taking glucocorticoids, alcohol intake, family anamnesis of GI diseases, etc.

Results. In the group of patients with intestine pathology, the frequent risk factors were low body weight - BMI from 16.5 to 18.1 (35%), administration of OP-associated medications (26.6%), smoking (34.3%). These patients have an increased risk of OP development, according to the coefficient of 10-year probability of fractures, which is 18% for major fractures and 5.6% for hip fractures. Among patients with pathology of the hepatobiliary tract, the most frequent risk factors were alcohol intake of 3 units per day or more (26.6%), and a decrease of BMI below 18.5. The 10-year risk of major fracture was 6.6%, and that of hip fracture - 2.2%. In the third group of examined patients with gastric pathology, among the risk

factors, it is worth to note family anamnesis and low BMI. The risk of osteoporosis and bone fractures was slightly lower compared to other groups: for major fractures - 5.1%, for hip fractures - 1.2%.

Conclusion. Therefore, chronic diseases of the GI tract, especially of intestine, can affect bone metabolism, contributing to the development of secondary OP. Identification among the patients with GI diseases persons with a high risk of OP developing will prevent further reduction of bone mineral density by modifying the risk factors and prescription of prophylactic therapy.