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ABDOMINAL OBESITY AS A PREDICTOR OF GERD DEVELOPMENT

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Introduction. Obesity is one of the most complicated medical and social problems of our time. Its high prevalence, deterioration of quality of life and extremely high mortality from its effects require the combined efforts of physicians of different specialties. Gastroesophageal reflux disease (GERD) is an urgent problem in modern gastroenterology, due to its high frequency of occurrence, wide range of complaints expressed by the patients, development of severe complications and need for long-term therapy. There are a lot of risk factors for development of GERD and an important role is taken by abdominal obesity (AO) which, in addition to mechanical increase in intra-abdominal pressure, is accompanied by systemic chronic inflammation due to ability of adipocytes and adipose macrophages to produce a number of proinflammatory cytokines. According to the literature, C-reactive protein (CRP) can serve as a marker of the inflammatory process in obesity.

Aim. The aim of the study was to determine the relationship between the presence of excess body weight and AO, and the incidence of GERD.

Materials and methods. A retrospective analysis of 52 case histories of patients in the gastroenterology department of Kharkiv Regional Clinical Hospital was conducted. Anthropometric data (height, weight, waist circumference) were studied, body mass index (BMI) was calculated, and serum CRP was analyzed.

Results. Having studied the structure of all patients by gender, it was determined that the number of men prevailed and amounted to 58%. The average age of the patients was 46 years. It was determined that 75% of patients had an increased BMI, indicating that they were overweight. It was found that 54% of patients had BMI in the range of 25 to 30, which is a sign of being overweight, while 36% of patients had obesity grade I, and

10% of patients had obesity grade II. It was determined that 71%, namely 28 patients, had signs of AO. It was reported that in almost half of patients the CRP was above normal and the highest value was 14.8 mg/L. Analyzing patients with CRP levels above normal and according to their BMI, it was found that only 2 patients had elevated CRP against normal body weight, 9 patients were overweight, while almost all patients with obesity grade I and 100% of patients with II degree of obesity had high values of CRP. In addition, it was determined that 75% of patients with AO also had an increased rate of this marker of inflammation.

Conclusions. 75% of patients with GERD were overweight, and almost half of them had grade I and II obesity. Almost $\frac{3}{4}$ of patients were diagnosed with AO, which is an important risk factor for developing GERD. It was noted that almost half of the patients had an elevated CRP, the majority of whom were overweight and had AO. On this basis, we can assume that not only the creation of a mechanical obstacle, but also the humoral activity of adipose tissue is essential in the development and maintenance of the inflammatory process in the esophagus in patients with GERD in combination with obesity.