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**CLINICAL MANIFESTATIONS AND ENDOSCOPIC PICTURE OF
ESOPHAGOGASTRODUODENAL PATHOLOGY IN PATIENTS WITH
DUODENOGASTRIC REFLUX**

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Background. There is a lack of unified understanding of the role of duodenogastric reflux (DGR), which requires additional studies of this pathology.

Objective: to study the endoscopic picture of the esophagus, stomach, and duodenum, depending on the presence of DGR and identify risk factors for its development.

Material and methods. We analyzed 666 records of patients aged 18 to 80 years. The patients underwent high resolution esophagogastroduodenoscopy (EGD) with narrow-band imaging (NBI). 169 (25.4%) men and 497 (74.5%) women were examined. The average age was 51.34 ± 14.51 years. The subjects were divided into two groups. Group 1 consisted of the patients with endoscopically proven DGR, patients in Group 2 presented with no obvious signs. In both groups, we assessed clinical symptoms, endoscopic signs of the esophageal, gastric and duodenal pathology, presence of *H. pylori* infection (HP status), as well as the effects of age, gender, body weight, and smoking. We used methods of descriptive and analytical statistics, rejecting the null hypothesis at $p < 0.05$. The technical aspects of the analysis are performed in the free PSPP package, as well as in the Microsoft Excel editor.

Results and discussion. The study found that endoscopically-proven DGR was recorded in 359 (53.9%) patients. In 307 patients (46.1%), there were no signs of DGR. In patients with DGR, symptoms of bitterness in the mouth, mushy and smearing stools were significantly more common ($p < 0.05$), nausea and mesogastric pain were more common ($p > 0.05$). In Group 1, signs of esophagitis were significantly more common ($p < 0.05$; 72.50% and 52.44%, respectively). According to the type of esophagitis (non-erosive/erosive) and the incidence of Barrett's esophagus, there were no differences between the groups. It is worth noting that in Group 2 a hernia of the esophageal orifice of the diaphragm (HEOD) was recorded significantly more often ($p < 0.05$). Endoscopic signs of gastritis were found in both groups with equal frequency. At the same time, mesogastric erosions were more often detected in patients without DGR. The incidence of mesogastric atrophy in the groups did not differ, while the incidence of intestinal metaplasia (of the gastric antrum according to EGD with NBI) was significantly ($p < 0.05$) higher in Group 1. *H. pylori* infection in patients with DGR was present in 56.21% of the cases, without DGR – in 67.39% ($p < 0.05$). It was revealed that there was no correlation between the endoscopic findings of signs of DGR and age, while there was a statistically significant correlation with the female sex ($p = 0.007$), a direct correlation with the smoker's index ($p = 0.022$), an inverse correlation with the body mass index ($p = 0.036$), and an inverse correlation with *H. pylori* infection ($p = 0.032$).

Conclusions. Endoscopically-proven DGR occurs in more than 50% of patients seeking medical assistance about a digestive pathology. In patients with DGR, mesogastric pain, nausea and especially bitterness in the mouth are more often noted. In patients with DGR, according to EGD findings, HEOD is less often detected, erosion of the gastric mucosa is less frequent, but esophagitis, intestinal metaplasia of the antral gastric mucosa, multiple gastric polyps are more often recorded. Correlation of DGR with the female sex, lower body mass index, lower *H. pylori* infection, and elevated smoker's index was revealed.