THE ROLE OF METABOLIC SYNDROME IN PATIENTS WITH MORBID OBESITY

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Metabolic syndrome (Reaven syndrome, "syndrome X") is a set of metabolic, hormonal and clinical disorders in the human body, the basis of which is obesity[7,1]. With the global increase in obesity, MS has become one of the major public health problems worldwide[4].

Metabolic syndrome (MS) is a symptom complex that combines abdominal obesity, insulin resistance, hyperglycemia, dyslipidemia and arterial hypertension[3,8,9]. In addition, this syndrome is often combined with hyperuricemia (excess uric acid in the blood), impaired hemostasis (blood clotting), subclinical inflammation, obstructive sleep apnea-hypopnea syndrome (sleep apnea) [5,7]. A number of researchers believe that the main link in the pathogenesis of MS is obesity, which is an independent disease and is associated with hyperinsulinemia (HI) and insulin resistance[6,10].

The World Health Organization (WHO) recommended the use of the term "metabolic syndrome". The International Diabetes Federation (2005) included the following disorders in the metabolic syndrome (MS):

1. Central obesity, assessed by waist circumference, taking into account ethnically specific criteria (if BMI› 30 kg/m 2 , the presence of central obesity is assumed by default, and waist circumference measurement is not required).

2. Plus any two of the following four factors:

● increased triglyceride levels (≥ 150 mg/dL (1.7 mmol/L) or specific treatment for this dyslipidemia); ● decreased HDL cholesterol (‹ 40 mg/dL (1.03 mmol/L) in men, ‹ 50 mg/dL (1.29 mmol/L) in women, or specific treatment for this dyslipidemia);

● increased blood pressure (systolic BP ≥ 130 or diastolic BP ≥ 85 mmHg, or treatment for previously diagnosed hypertension);

● increased fasting plasma glucose (FPG ≥ 100 mg/dL (5.6 mmol/L) or previously diagnosed type 2 diabetes mellitus. If plasma glucose is › 5.6 mmol/L or 100 mg/dL, an oral glucose tolerance test is strongly recommended, but this test is not necessary to confirm the presence of the syndrome) [2].

Objective of the study: to improve the early diagnosis and effectiveness of the treatment of metabolic syndrome in patients with morbid obesity.

Material and research methods. In our clinic, metabolic and bariatric surgery began to develop in 2016, and began to gain particular popularity after 2018. In our clinic, from 2016 to 2022, 167 bariatric and metabolic surgeries were performed, of which 75 were mini gastric bypass and 92 were SG. Results. Data analysis shows that 49 (53.2%) prevails from the III degree, and 42 (45.6%) patients were diagnosed with II degree obesity. Of the operated patients, 35 (38%) patients were diagnosed with metabolic syndrome. In our

patients, hyperglycemia, considered as one of the main components of MS, was less common than dyslipedemia and arterial hypertension.

Observations showed that 6 months after the operation, dyslipidemia was corrected by 51%, arterial hypertension by 43%, and after 1 year, dyslipidemia was corrected by 71%, arterial hypertension by 57%.

Conclusions.

• Analysis of treatment results shows that the use of longitudinal gastric resection has a number of advantages in patients with morbid obesity and has a corrective effect on metabolic syndrome.

• Dyslipidemia and arterial hypertension are more common than hyperglycemia as a component of MS, and can be an early diagnostic criterion for MS along with obesity.

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