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Comment

In following issue of "Progress in Medicine" we present the first part of the monography describing the problem of obesity and possibilities of its treatment. Currently, obesity is becoming huge health and socio-economic problem in Poland and worldwide. It concerns approximately 6 billion people (13% of world population, 11% men and 15% women) which was the main cause for preparation of this monography. Obesity is caused by accumulation of body mass due to positive energetic balance.

The causes of its epidemic are complex. Many of them are described by the term "environment in favor for obesity" and include society structure, economic policy, socio-economic development, genetic predispositions to obesity. The research on the monogenic and poligenic type of obesity as well as on the significance of association studies on the whole genom (GWAS) are still in progress. Those issues have been developed in articles "Epidemiology and pathogenesis of obesity" as well as "Genetics in obesity".

According to global epidemic of obesity, bariatric-metabolic surgery has become one of the most rapidly developing areas in surgery in 20th and 21th century. Although, the origins of bariatric surgery are in USA and countries of Western Europe, in 1950s the number of conducted procedures was insufficient. In 1980s and 1990s the discipline rapidly developed all over the world. Currently, 500 000 procedures are performed including 2000 in Poland.

Every case of obesity with BMI ≥ 40 requiring surgical treatment increases the rate of anesthetic preoperative assessment (ASA) and increases the risk of developing complications in the perioperative period. Patients' preparation for general anesthesia, and then description of types of bariatric and metabolic operations and their mode of operation are presented in the publications "Anaesthesia for bariatric surgery as an element of perioperative treatment" and "Progress in bariatric-metabolic surgery". All bariatric techniques lead to weight loss and a reduction in BMI.

The results presented in the world literature of laparoscopic adjustable gastric banding (LAGB) show that most of the clinical and biochemical parameters are improved. Many of them present very favorable results regarding short-term observation. The most important treatment effects occur in the first two years after surgery, but LAGB is effective in improving BMI values also in long-term studies, which are described in the publication entitled: "Analysis of the influence of laparoscopic adjustable gastric banding on BMI, carbohydrate and lipid metabolism in obese patients". Among many methods of bariatric-metabolic treatment, a rather new method of sleeve gastrectomy deserves attention, after which a satisfactory decrease in body weight and the disappearance of comorbidities is observed.

The final therapeutic effect is the result of, above all, the reduction of the volume of the stomach. In addition, recent studies suggest that the resection of the major part of the stomach (fundus and corpus) causes significant changes in gastrointestinal motility, neurohormonal and carbohydrate-fat balance. Currently, sleeve gastrectomy is the most frequently performed surgery in the world that will also lead to reduced symptoms or remission of comorbidities. Similar results were obtained in the study "Laparoscopic sleeve gastrectomy (LSG) as a operative method of morbid obesity treatment and resolution of its comorbidities".

Gastric fistula is the most frequent complication occurring after sleeve gastrectomy, this is due to many factors including concomitant diseases, type 2 diabetes, metabolic syndrome and dysproteinemia, also smoking and taking certain medications impairing healing (steroids, immunosuppressive drugs). An example of this is a very interesting case report "Gastric fistula and its treatment after sleeve gastrectomy in patients after kidney transplantation – a case report".

I recommend to all physicians involved in the treatment of obesity and others reading this issue. Information included in publications is useful in medical practice in the treatment of obesity.

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