## SURGICAL APPROACHES TO AID AND SUBSTITUTE WEIGHT LOSS Summary

Obesity is a continuously growing health problem of today's civilization. Two out of three adults in Poland are obese or overweight. Obesity increas-

in Poland are obese or overweight. Obesity increases the likelihood of various diseases, particularly heart disease, type 2 diabetes and dyslipidemia. The primary treatment for obesity is dieting and physical exercise. Whenever it fails, other types of treatment emerge, including cosmetic surgery with its devices for liposuction and endoscopic approach with the placement of an intragastric baloon to reduce stomach volume and leading to earlier satiation and reduced ability to absorb nutrients from food. But one should not be misguided, although the above techniques are outpatients, can still produce the dangerous and even life-threatening consequences, as surgery. Next step in treatment is weight loss surgery. The latter relies on various principles: the two

most common approaches are reducing the volume of the stomach (e.g. by adjustable gastric banding and sleeve gastrectomy), which produces an earlier sense of satiation, and reducing the length of bowel that comes into contact with food (gastric bypass surgery, biliopancreatic diversion), which directly reduces absorption. Surprisingly, obese patients who underwent surgical treatment for weight loss had significant reductions in the components of the metabolic syndrome, especially diabetes type 2. These changes occur independently of weight loss typical for bariatric procedures and are so promising that open a new window in nowadays therapies. Holistic approach to obese patients is the only way to reduce morbidity and mortality deriving from concomitant and composite metabolic changes which influence the same fat and brain cells.