

## **Endoscopic sleeve gastroplasty as a new minimally invasive procedure for obesity treatment**

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**Introduction:** Bariatric procedures are considered the most effective methods of treating obesity but they are costly and entail a high risk of complications. Thus, there is a need to look for better bariatric treatment solutions. One of the newest, highly promising bariatric methods is endoscopic sleeve gastroplasty (ESG). ESG is comparably effective to other bariatric procedures in terms of weight loss but at the same time it is much less invasive.

**Discussion:** Nine obese patients underwent ESG. Under general anaesthesia, an endoscope was inserted into the stomach, where a row of 4-5 running stitches was placed. Each of the stitches was cinched tight, which resulted in gastric lumen reduction comparable to that achieved with laparoscopic sleeve gastrectomy (LSG). The procedures were performed without any severe peri-operative complications. After the surgery, the patients reported a substantial weight loss. Mean %TBWL was 8.6%, 15.4% and 19.6% at 1, 2 and 3 months, respectively. The method guarantees gastric volume reduction comparable to that achieved with LSG. Compared to LSG, endoscopic sleeve gastroplasty is substantially less invasive, requires shorter procedure time and shorter hospital stay.

**Conclusions:** Endoscopic sleeve gastroplasty is a promising method of treating obesity. The initial results confirm that the effectiveness of the surgery in terms of body weight loss is similar to that seen in other forms of bariatric treatment.

**Kategoria:** K3. Chirurgia patologicznej otyłości / Techniki i metody terapii endoskopowej w chorobach przełyku / Pathological obesity surgery / Techniques and methods of endoscopic therapy in diseases of the esophagus