

## **Peroral endoscopic myotomy (POEM) for patients with achalasia: a single-center experience**

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**Introduction:** Peroral endoscopic myotomy (POEM) has been developed as a minimally invasive endoscopic treatment for achalasia. The aim of this study was to retrospectively investigate the clinical efficacy and safety of POEM in patients treated in our center. Relief of patients' symptoms was defined as the primary outcome. Secondary outcomes included symptoms relapse, and clinical reflux adverse events. Procedure-related complications were also analyzed.

**Results:** From 2015 to 2018 forty consecutive achalasia patients (20 men and 20 women; aged  $47.1 \pm 12.66$  years) who underwent POEM were analyzed. The diagnosis was confirmed by endoscopy, barium swallow and high-resolution manometry. POEM procedure was performed according to generally accepted guidelines. In one case the procedure was aborted due to intense fibrosis within the submucosal layer. Procedure-related complications were noted mostly at the beginning of the learning curve: three cases of pneumothorax (7.69%), four cases of capno-peritoneum (10.2%). No severe complications were noted. At the follow-up, (3 months after the treatment) the median Eckardt score significantly reduced from  $8.75 \pm 2.2$  preoperatively to  $1.53 \pm 1.4$  ( $P < 0.01$ ). Three patients (7.6%) had symptoms relapse and five patients (12%) developed gastro-esophageal reflux.

**Conclusions:** The first experience with POEM in our center confirmed that this method is a safe and efficient alternative treatment for achalasia patients.

**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