PERORAL ENDOSCOPIC MYOTOMY FOR ESOPHAGEAL ACHALASIA IN PORTUGAL – OUTCOMES OF THE FIRST 60 PROCEDURES

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INTRODUÇÃO

Per-oral endoscopic myotomy (POEM) is an innovative achalasia treatment procedure that involves myotomy of the lower esophageal sphincter (LES) through a submucosal tunneling approach, combining the efficacy of surgical myotomy with the benefit of being a less invasive treatment. This study aimed to examine the safety and short-term outcomes of POEM in a Portuguese center.

MÉTODOS

Sixty POEM procedures were performed on 59 consecutive patients at our institution between January 2017 and August 2020. A prospective study of a consecutive series of patients was conducted, including procedure time, myotomy location and length, adverse events and clinical success. An Eckardt score of ≤ 3 after POEM was deemed as a successful outcome. Gastroesophageal reflux disease (GERD) was evaluated based on symptoms and on upper endoscopy, which was performed at 3 to 6 months postoperatively to check for reflux esophagitis.

RESULTADOS

Per-oral endoscopic myotomy was successfully completed in 98.3% (n=59) of the total procedures. Of these, 70% (n= 42) were naïve and 30% (n= 18) had previous treatments. One procedure was not successful due to severe submucosal esophageal fibrosis. Mean procedure time was 68 ± 20 min (range 45-125 min). There were no major adverse events. Minor adverse events were rare (6.8%), and there was no perioperative mortality. The Eckardt score significantly decreased from 6.85 ± 2.3 preoperatively to 0.5 ± 0.9 postoperatively (p < 0.05). Overall clinical success was documented in 98.3% and 98.3% at 1 and 3 months, respectively. This short-term outcomes after POEM were independent of previous treatments. Symptomatic GERD was seen in 20.3% of patients.

No. of patients	59
No. of POEM	60
Age (years), mean ± SD (range)	53.9 ± 16.6 (17 – 79)
Gender (male/female)	26:33
Chicago classification, n (%)	
Type I	15 (25.4%)
Type II	37 (62.7%)
Type III	7 (11.9%)
Naïve to treatment, n (%)	41 (69.5%)
Previous treatment, n (%)	18 (30.5%)
Pneumatic dilation	14 (23.7%)
Heller's myotomy (LHM)	3 (5.1%)
POEM	1 (1.7%)

Table 1. Patients characteristics.

Procedure time (min), mean ± SD (range)	68 ± 20 (45-125)
Myotomy length (cm), mean ± SD (range)	11 ± 3 (6-20)
Esophageal side	7.94 ± 2.8 (5-17)
Gastric side	3.2 ± 0.8 (2-5)
Myotomy location, n (%)	
Anterior	44 (74.6%)
Posterior	15 (25.4%)
Adverse Events, n (%)	4 (6.8%)
Intraprocedural minor bleeding	2 (3.4%)
Capnoperitoneum requiring drainage	1 (1.7%)
Dorsalgia (muscle contracture)	1 (1.7%)

Table 2. Procedure-related parameters.

Symptomatic GERD, n/total (%)	12/59 (20.3%)
Erosive Esophagitis, n/patients with follow-up endoscopy (%)	14/43 (32.6%)
LA Classification	
Grade A	12 (27.9%)
Grade B	0 (0%)
Grade C	2 (4.6%)
Grade D	0 (0%)

Table 3. Evaluation of Gastroesophageal reflux disease after the procedure.

CONCLUSÕES

Per-oral endoscopic myotomy was successfully completed in all cases, even in older individuals and in those submitted to previous interventions. Hence, our results confirm the excellent short-term efficacy reported in the largest patient series in our country and supports POEM as one of the first-line achalasia therapies when performed by experienced operators.