

CO-029 - PERORAL ENDOSCOPIC MYOTOMY FOR THE MANAGEMENT OF ACHALASIA IN CHILDREN: RESULTS OF A PROSPECTIVE SERIES WITH LONG TERM FOLLOW-UP

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Introduction/Aims: Achalasia is very rare in children. Peroral Endoscopic Myotomy (POEM) is one of the first-line options for the treatment of achalasia in adults, but it has been occasionally used in children. We report on a large series of children, treated with POEM in a single centre, with a long-term follow-up.

Materials/Methods: Between May/2011-August/2018, 599 patients underwent POEM. Children (age<18 years-old) were identified on a prospective database. Preoperative and perioperative information, success-rate and adverse events were assessed. Postoperative gastroesophageal-reflux (GER) was assessed with pH-monitoring study and esophagogastroduodenoscopy.

Results: Thirty children (50% male), mean age 11.6±4.47 years-old (2-17 years-old) underwent POEM. Two children were affected by Down-syndrome and two by Allgrove-syndrome. Four had undergone pneumodilation. At high-resolution manometry, 6 patients had type-I achalasia, 23 type-II and 1 type-III. Mean 4sIRP was 34.8±11.5 mmHg. Mean preoperative Eckardt-score was 7.2±2.0. Symptoms duration before treatment was 12±15.86 months. POEM was successfully completed in 29 cases; one procedure was interrupted because of massive fibrosis of the esophagogastric junction, caused by 4 previous dilations. Average length of myotomy was 10±2.5 cm and mean procedural time was 51±14.3 minutes. In one patient, the day after POEM, Gastrografin-swallow revealed a small leak, that was managed conservatively. One patient had aspiration pneumonia. Two patients were lost at follow-up. A mean 44.5±23.7 months follow-up was available for 27 patients. All the patients had an Eckardt-score <3 and normal growth-curve by age. Twenty-three patients completed GER evaluation. Pathologic acid exposure was detected in four patients (17%); two had a grade-A esophagitis and one grade-B. At the date of the last follow-up, 22% of patients were receiving PPI for the treatment of symptomatic-GER with a good response.

Conclusions: POEM is safe and effective treatment of achalasia in children. GER has been detected in a small percentage of patients and was managed conservatively.