

The Value of Intraoperative Endoscopy and Manometry in the Surgical Treatment of Achalasia

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Abstract

Introduction: Achalasia is the most common esophageal motility disorder. So far, the treatment, which can be medical, endoscopic or surgical, provides only symptomatic relief. However, this can grant a normal life to the patients. We focused our study on the value of pre- and intraoperative endoscopy and manometry for improving outcome of surgical treatment.

Material and method: This is a retrospective chart review of a cohort of patients diagnosed with achalasia at St Mary Clinical Hospital, Bucharest between 2013 and 2017. The objective of this study was the assessment of the immediate and long term efficacy of laparoscopic Heller myotomy associated with Dor anterior fundoplication, intraoperative endoscopy and intraoperative manometry, as well as the assessment of late post-operative complications. The diagnosis of achalasia was based on symptoms, barium esophagogram, upper endoscopy and esophageal manometry. The immediate efficacy was assessed by comparing Eckhart score, LES pressure and LES vector volume before and after surgery.

Results: In total, 47 patients, had surgical treatment for achalasia between 2013 and 2017. For 7 patients who failed prior endoscopic or surgical, this was the second therapeutic intervention. 39 patients underwent laparoscopic surgery, 30 patients had associated intraoperative endoscopy and, 22 patients had associated intraoperative manometry. There was a significant improvement in mean Eckardt score (from 6,5 to 1,26, $p < 0,001$), mean LES pressure (from 18,5 mmHg to 7 mmHg, $p < 0,001$). Morbidity was 2,12 % and we have had 1 recurrence and 2 postoperative esophagitis.

Conclusions: At present, laparoscopic Heller myotomy with an anterior Dor fundoplication, is a standard indication in achalasia, proving its efficiency and safety. Intraoperative use of endoscopy is recommended and intraoperative manometry may provide additional information on the effectiveness of myotomy. Surgical treatment of achalasia should be performed in specialized, experienced centers.

Key words: achalasia surgery, intraoperative endoscopy and manometry