Esophageal perforation or fistula is a devastating condition with diagnostic and therapeutic challenges. It is associated with high morbidity and mortality due to its rapid progression to mediastinitis or peritonitis, septic shock and multiorgan failure. Iatrogenic perforation is the commonest in this era.

We hereby report a case of esophagopulmonary fistula following a right lower lobectomy which was successfully treated with endoscopic clipping. A 52-year-old man presented with productive cough and weight loss for 2 weeks. Initial workup in another center revealed right lung lower lobe lesion and a right lower lobectomy was done. Saliva and food particles were noted in chest drain on post-operative day 2 due to esophageal perforation.

Re-thoracotomy, washout and esophageal repair was done. An open window thoracostomy was created for further drainage and parenteral nutrition was initiated. Histology of the lobectomy specimen revealed actinomycosis of right lung. However, there was persistent leak from the esophagus with suspicion of esophagopulmonary fistula. He was then transferred to our center for further treatment. OGDs revealed a 5mm defect at right lateral wall mid thoracic esophagus, about 28cm from incisor, with healthy and supple surrounding mucosa. Contrast study revealed esophagopulmonary fistula. Esophageal defect was successfully closed with over-the-scope padlock clip (Steris). Repeat contrast study 1 week later revealed resolution of fistula.

Sepsis and source control, nutritional support with restoration of gastrointestinal tract integrity are key steps in the management of esophageal perforation. Endoscopic treatment is efficacious, less invasive, and with the advantage of organ preservation. Endoscopic clipping is safe and effective in selected group of patients with esophageal perforation or fistula.

575. DOCS CHEST PAIN AFFECT THE LONG TERM OUTCOME OF SURGERY FOR ESOPHAGEAL ACHALASIA? Valentina Tassi1, Fabio Balbi2, Marialuisa Lugaresi2, Niccolò Daddi, Francesco Bombas1, Vladimir Pilotti2, Sandro Mattioli2
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Literature supporting the adoption of POEM in place of the standard Heller myotomy in the presence of significant chest pain associated with typical symptoms is rare. A total of 88 patients were staged according to the Chicago classification, generally reports on outcome data collected after short follow up periods. We aimed to assess behaviors of chest pain in the long term in a case series of patients submitted to the Heller-Dor operation.

Between 1978 and 2021, 394 achalasia patients underwent the Heller-Dor operation. Chest pain was evaluated according to its frequency: (0: absent; 1: occasional; 2: weekly; 3: daily): 81 preoperatively complained of chest pain (score 2-3) (CP group), 313 did not score (0-1) (NCP group). Patients were followed up according to a timed protocol based on clinical assessment of dysphagia (D0 absent – D3 each meal), GERD symptoms (RS0 absent – RS3 each meal), Barium swallow and endoscopy (E0: normal, E1: mild esophagitis, E2: erosive/ulcerative esophagitis) were performed at each planned control. CP and NCP were compared.

CP group had shorter duration of dysphagia (p=0.03), smaller esophageal diameter and lower barium column (p<0.05). At a median follow-up of 10 years for CP and 11 years for NCP (p=0.166), the frequency of dysphagia (p=0.05), GERD symptoms (p=0.03) and esophagitis (p=0.07) was similar in the two groups. Chest pain progressively attenuated in intensity and frequency; median chest pain score preoperatively was 3; at follow-up it was 0 (p<0.01). Clinical results obtained in CP patients (satisfactory D0-2, RS0-2, and E1 in 95%) were not inferior to those obtained in NCP patients (satisfactory in 93%)(p=0.05).

According to our single center case series, in the long term chest pain does not influence negatively HD outcome which is absolutely competitive with that generally reported for POEM and pneumatic dilation. Results presented in this study must be verified: as new randomized prospective studies would require a too long lag time, valid retrospective multi center studies should be performed.

576. MINIMALLY INVASIVE ESOPHAGECTOMY IN ESOPHAGEAL CANCER: IMPROVING OUTCOMES WITH A SYSTEMATIC PROTOCOL.
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Minimally invasive esophagectomy (MIE) has the advantages of reduced post-op cardiopulmonary complications, faster recovery and better quality of life. MIE has been the standard approach for esophageal cancer in our center since year 2020. A systematic approach with prehabilitation and enhanced recovery after surgery is key in improving outcomes after MIE.

We herein report our protocol for MIE in esophageal cancer. A stepwise diagnostic, staging and multidisciplinary management pathway was adopted. All patients with histologically confirmed esophageal cancer were staged according to the 8th edition AJCC cancer staging with PET-CT scan. Patient assessment, comorbidity optimization and 3-axis prehabilitation were initiated on the first consultation. All cases were discussed in the multidisciplinary tumour board meeting and multimodality treatment approach was advocated. MIE was the standard surgical approach with selective ERAS pathway especially on goal directed fluid therapy, multimodality analgesia, timely extubation, early ambulation and enteral feeding.

A total of 10 patients underwent MIE between June 2020 to June 2021 with the MIE protocol. The mean age was 56.7. Adenocarcinoma was the commonest histology. All patients had neoadjuvant therapy due to locally advanced disease. 6 patients had McKeown MIE with either 3-field or total 2-field lymphadenectomy. The mean length of stay post-op was 8.3 days. The average post-op pain score was 2.3 and the mean time to ambulation post-op was 1.6 days. Post-operative complications were noted in 4 patients with only one being Clavien Dindo grade 3. There was no 90-day mortality post-op.

The early result of this systematic protocol with multidisciplinary approach, prehabilitation, MIE and selective ERAS pathway was promising. Evidence based practice with regular clinical audit is important in improving the quality of care and clinical outcomes.