

Tackling complications of POEM - Intra & post-op bleeding, difficult mucosal closure

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Per Oral Endoscopic Myotomy (POEM) revolutionized treatment for esophageal motility disorders. Various prospective cohort studies confirmed the clinical safety and efficacy of POEM for treatment of Achalasia [1,2,3]. We recently reported a retrospective cohort study comparing POEM against laparoscopic Heller's myotomy (LHM) for treatment of Achalasia in 56 patients. Patients who received LHM had longer operative time, higher blood loss and requirement of analgesics compared to those underwent POEM. In both groups, patient achieved similar improvement in dysphagia score as well as GERD related quality of life outcomes [4]. NOSCART reported a white paper on POEM which showed that life threatening adverse events were uncommon [5]. Intraoperative bleeding may occurring during dissection at any point, but commonly precaution should be taken at the gastroesophageal junction and cardia where profuse bleeding can be triggered by dissecting over submucosal arterioles. Usually, control of bleeding can be achieved using electro-surgical hemostatic forceps. Endoscope with waterjet function is essential to provide a clear view for target coagulation at the bleeding vessel. If the bleeding is torrential, a reported technique of endoscopic compression and tamponade can be applied within the normal esophageal lumen to the bleeding site before further hemostasis. Ren et al reported perioperative management and treatment of complications after POEM in 119 patients [6]. One patient had a delayed haemorrhage (0.8%) and required reexploration of the submucosal tunnel for hemostasis by endoscopy. Generally, the incidence of postop bleeding is low, as prevention of bleeding will be important. We routinely use coagulation mode for myotomy, and check both sides of the myotomy before closure of the submucosal tunnel entrance. Most of the cohort studies reported the technique of endoclip closure for the mucosal entrance after POEM. The success of this simple technique is very high. However, patients with a long history of Achalasia tend to have thickened mucosa which renders closure with clips difficult. We have applied the Overstitch for closure of mucosal entrance among those with thickened mucosa. Other techniques for closure of mucosal entrance included over-the-scope clips, application of tissue glue or placement of stent. Difficult mucosal closure especially in those who had full thickness myotomy, may lead to leakage and required surgical drainage.

References

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