PER-ORAL ENDOSCOPIC MYOTOMY (POEM)

POEM represents a new innovative minimally invasive endoscopic myotomy procedure that utilises submucosal third space endoscopy to dissect the submucosal layer and an internal myotomy is accomplished followed by closure of the tunnel. Published literatures from several units all over the world have consistently shown a high clinical success rate with minimal complications (1). Recent meta-analyses have shown it to be as effective as Heller’s myotomy for short term success rates (2); low risk of complications (3) and high technical and clinical success rates (4).

PATIENT SELECTION FOR POEM

POEM has been performed in all age groups from paediatric to elderly population and in all patients with HRM Chicago classification. Further evidence also shows that it can be performed in patients with sigmoid oesophagus, previous endoscopic and surgical therapy (1). Patients will be identified in the gastroenterology clinic with the diagnosis of achalasia confirmed by high resolution manometry. All patients will undergo EUS to evaluate the oesophageal muscle wall thickening and rule out any potential pseudo-achalasia. Once a firm diagnosis is established, all treatment options will be presented with careful and thorough discussions regarding the advantages and disadvantages of each approach. Patients who have been diagnosed with Achalasia and have undergone prior treatment with suboptimal clinical response will be offered different therapy options going forward for sustained clinical benefit. The patient will then be able to make an informed judgement regarding the treatment choice that best suits their situation. The trust approved patient information leaflet is available for patients and relatives to consider POEM as a potential therapeutic procedure. Once identified, data regarding symptoms, diagnostic investigations, prior therapeutic intervention will be
collected and a multidisciplinary team discussion regarding the utility of POEM will be undertaken. Furthermore, patients and relatives will be given sufficient time to undertake their own research, ask further questions regarding the procedure. All procedures will be performed under GA with paralytic agent with CO₂ insufflation in the endoscopy unit.

**PERIPROCEDURAL MANAGEMENT**

Once tunnel is completed and myotomy performed the tunnel will be checked for any active bleeding and mucosal injury. Following this Gentamicin 120mg will be instilled into the tunnel. In addition to recovery management in the endoscopy unit following the procedure the patient will be admitted for overnight observation, fluid management and antibiotics (5). Standard plan for overnight management includes

1. Patient maintained NBM till follow up contrast study the following day.
2. Pain management with opioid analgesia
3. IV antibiotics Cefuroxime and Metronidazole.
4. IV proton pump inhibitor
5. IV antiemetic
6. IV fluids
7. Contrast study the following day.

If the contrast study shows adequate emptying, no leak and all the clips are intact the patient will be reviewed for symptoms and discharged if clinically well with advice regarding liquid diet initially followed by soft diet for 1-2 weeks. The patient will also be discharged on oral antibiotics (Augmentin) and PPI with a follow up arranged in outpatient clinic.
References


