

Surgical management and long-term follow up of oesophageal perforations

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Background

Oesophageal perforations, especially spontaneous perforations (Boerhaave Syndrome (BS)) are associated with high morbidity and mortality, particularly when there is a delay in diagnosis. There is a lack of consensus in literature regarding surgical management algorithms. There is also negligible data on long-term follow-up and quality of life (QoL) of survivors of oesophageal perforations.

Objectives

This study aims to report on surgical management and long-term QoL outcomes of seven patients that underwent single stage surgery for oesophageal perforation in specialised upper gastrointestinal units.

Methods

Five patients with BS and two patients with iatrogenic perforation were retrospectively analysed from a single surgeon series over a two year period. Time to surgery and operative technique were recorded. Complications and length of stay (LOS) documented. All patients were contacted greater than three years after to assess for dysphagia, reflux disease, proton-pump therapy (PPI) use. All patients completed the SF-12 questionnaire; a validated patient-reported measure of health perception and QoL.

Results

The mean age was 49.6 years (range 17-75). All patients underwent surgery within 24 hours of symptom onset. The operative approaches for BS are as follows: Four patients had midline laparotomy with oesophageal and mediastinal access via hiatal dissection. One patient had a bilateral thoracoscopic approach with drainage. When possible, oesophageal myotomy and primary closure was performed. Of the two patients that had iatrogenic perforation, one patient had a laparotomy, mediastinal lavage and stent insertion. The second patient had endoscopic clip repair. Two of seven patients were unable to be contacted for long-term follow-up. One patient reported dysphagia and no patient reported reflux disease or PPI usage on follow-up. The QoL of the patients was assessed using SF-12 questionnaire.

Conclusion There are many approaches available to manage oesophageal defects. These will vary according to injury factors (such as site, severity, circumference involvement), institutional/surgeon factors and patient factors. However, we have demonstrated a high salvage rate with favourable long-term outcomes with early intervention.