

AB003. Early experience of robotic assisted paraesophageal hernia repair (RA-PEHR) with anterior 270-degree fundoplication

Jarlath Christopher Bolger, Mohammed Alazzawi, Conor Brosnan, William Bryson Robb

Department of Surgery, Beaumont Hospital, Dublin, Ireland

Background: Laparoscopic surgery is considered the standard approach for the treatment of giant paraesophageal hernias. This approach is technically demanding with a significant learning curve and requires two operating assistants. Data about robotically assisted paraesophageal hernia repair (RA-PEHR) are scarce. This study reports an initial experience and feasibility of RA-PEHR in 7 patients with type III and IV paraesophageal hernias with crural closure and anterior 270-degree fundoplication.

Methods: Operations were recorded and perioperative data and short-term patient outcomes were prospectively assessed for 7 RA-PEHRs using a Da Vinci Xi platform.

Results: Median age was 67 years (range, 55–78 years) and there were 5 females and 2 males. Four patients had a type III hernia and 3 had a type IV hernia. Six patients underwent crural repair with anterior 270-degree fundoplication and 1 patient had placement of a biodegradable mesh with a Toupet style posterior fundoplication due to a large hiatal defect which did not close primarily. Mean procedure time was 167 minutes (range, 135–207 minutes) including robotic setup time and operative time has decreased with experience. There were no intra-operative complications or surgical mortality. Mean length of stay was 2.4 days (range, 1–4 days). No patients experienced have experienced postoperative dysphagia in the short period of follow-up and to date none have had recurrence of their hernia.

Conclusions: RA-PEHR with anterior fundoplication is a safe and reliable. We report outcomes similar to the short-term operative and functional outcomes found with conventional laparoscopic approaches. The initial learning curve appears relatively short.

Keywords: Paraesophageal hernia; fundoplication; robotic

doi: 10.21037/map.2020.AB003

Cite this abstract as: Bolger JC, Alazzawi M, Brosnan C, Robb WB. Early experience of robotic assisted paraesophageal hernia repair (RA-PEHR) with anterior 270-degree fundoplication. *Mesentery Peritoneum* 2020;4:AB003.