Gastric outlet obstruction due to a parastomal hernia: case report of a robotic-assisted laparoscopic surgery and literature review

Manoj Anandan[1,2], Mr James Roberts-Thomson[1,2], Associate Professor Craig Lynch[3-6]

1. Department of Surgery, North West Regional Hospital, Burnie, Tasmania 7320
2. Rural Clinical School, University of Tasmania, Burnie Tasmania 7320
3. Head of Lower Gastrointestinal Service, Peter Mac Callum Cancer Centre, Melbourne Victoria 3000
4. Director of Cancer Specialists, Richmond Victoria 3121
5. Epworth Healthcare, Richmond Victoria 3121
6. Associate Professor, University of Melbourne, Parkville Victoria 3010

Abstract: Parastomal hernias are a common complication of stomas. However, gastric outlet obstruction secondary to a parastomal hernia is a rarity, with only 14 reported cases in literature and predominantly found among elderly women above 75 years -old with colostomies. It has been hypothesized that gastric ligament laxity and acquired fascial defects increase the risk of parastomal gastric herniation. We report a retrospective case of a 60-year-old lady who presented with the above mentioned picture on a background of a previous abdominoperineal resection with an end colostomy for a colorectal carcinoma 9 years ago as well as 3 previous incisional hernias with mesh reinforcements. The patient presented with gastric outlet obstruction from a pre-existing parastomal hernia that manifested in localized upper abdominal pain and profuse vomiting. She had two previous admissions for partial gastric outlet obstruction from her parastomal hernia which were managed symptomatically. On this presentation, she was febrile, tachycardic with an irreducible tender parastomal hernia and elevated inflammatory marker. Computed tomography (CT) abdomen revealed more pronounced proximal gastric dilatation compared to previous scans with the body of stomach situated within the parastomal hernia. The patient was resuscitated and had nasogastric decompression pre-operatively and was noted to have dense intra-abdominal adhesions with a substantial stomach volume incarcerated within a large parastomal hernia intra-operatively. She had adhesiolysis performed laparoscopically using two robotic ports situated between two 12mm ports, an old mesh that was adherent to the stomach and small bowel was reduced with hernia reduced . The Sugarbaker technique was applied to repair the hernia with a Biodesign mesh and subsequently the end colostomy was mobilized, pulled through the hernial sac and the stoma refashioned. The patient had an uneventful recovery period post-operatively and was discharged on day five. The significance of this case in literature would be that it is the first where robotic-associated laparoscopic surgery was applied.

Recent Publications

Yee Chiang Lau S, Suat Chin N, Anandan M, **Goodall-Wilson D**. Duodenum inversum : a rare cause of chronic nausea and vomiting. ANZ Journal of Surgery 2020. https://doi.org/10.1111/ans.16489

Biography of presenting author

Dr Manoj Anandan studied at Monash University, Malaysia and graduated as MBBS(Hons) in 2017. He then worked as an intern in Burnie, Tasmania especially in the General Surgery Department. He then did some research with Mr James Robert-Thomson in 2019 before moving to University Hospital Geelong, Melbourne to work as a Surgical Registrar. He has published articles in ANZ Journal of Surgery and is currently working on an Australian audit of retromuscular ventral hernia repairs.



Details of presenting author to be mentioned in certificate:

Name: Manoj Anandan
Affiliation: University Hospital Geelong
Country: Australia
Contact details : manoj.anandan93@gmail.com