

Long-term safety and efficacy of mesh-reinforced laparoscopic hiatus hernia repair

Authors: Shaveen Kanakaratne MBBS, Daniel Leonard Chan^{1,2} MBBS, Sonia Tran¹ BMed, Cynthuja Thilakanathan MBBS, Nicholas Bull MBBS, Michael Leonard Talbot ^{1,2} MB ChB, FRACS

Authors affiliations: Upper Gastrointestinal Surgery Unit, St George Hospital, Sydney, New South Wales, Australia ¹, Department of Surgery, St George Clinical School, University of New South Wales ²

Correspondence: Dr Daniel Leonard Chan. Department of Surgery; St George Hospital, Kogarah, NSW 2217, Australia. Email: daniel.l.chan@unsw.edu.au

Background: Mesh-reinforced laparoscopic hiatus hernia repair is an alternative to traditional primary suture repair and is promoted to reduce recurrence rates. However, although the role of mesh in abdominal hernias is well established, the role of mesh in hiatus hernias is less clearly defined. We present a single surgeon, single institution experience to examine the long-term safety and efficacy of this technique.

Methods: A review was conducted of all patients undergoing mesh-reinforced laparoscopic hiatus hernia repair from 2005 - 2012. Data was retrieved from a prospective database and electronic clinical records. Patients were also contacted with telephone questionnaires to attain better than standard practice follow-up. Perioperative complications, mesh-type and long-term recurrence were analysed, with particular attention to mesh-related complications.

Results: 224 laparoscopic hiatus hernia repairs were performed on 192 patients during this period. 119 patients were female and mean age was 59 years (range 22-88 years). The mean follow-up was 54.5 months. Primary repair was performed in 37 cases (19%), biologic mesh-reinforcement in 25 (13%), polypropylene in 50 (26%) and ePTFE in 80 (42%). Four patients had mesh-related complications (dysphagia, infection and erosion). Overall recurrence rate was 22.9%. There was no mortality in this series.

Conclusion: Mesh-reinforced laparoscopic hiatus hernia repair can be performed safely with low mesh-related morbidity with synthetic mesh. Late recurrence is not uncommon, particular in those with biologic mesh.