Single incision laparoscopic surgery for Meckel's diverticulum in an adult

Simon Rajendran,¹ Syed Ali Naqi²

¹Department of Surgery, Royal College of Surgeons, Dublin, Ireland

²Department of Surgery, Beaumont Hospital, Dublin, Ireland

Correspondence to
Dr Simon Rajendran,
simonrajendran@gmail.com

Accepted 3 May 2014

DESCRIPTION

A 64-year-old man presented with right-sided abdominal pain. CT demonstrated an inflamed Meckel's diverticulum (MD) (figure 1). Single-incision laparoscopy (SILS) was performed (figure 2) and MD was identified and exteriorised. Extracorporeal resection and anastomosis of small bowel containing MD was performed. The patient recovered well and was discharged home 2 days later.

MD, a true congenital diverticulum, is the most common malformation of the gastrointestinal tract and is present in approximately 2% of the population. It was named after Johann Meckel, who

described the omphalovegital embryological origin in 1809. The most common presenting symptoms are rectal bleeding, intestinal obstruction, volvulus, intussusception and abdominal pain. Technetium-99m pertechnetate scintigraphy is the investigation of choice in children while CT is diagnostic in adults. Treatment options are diverticulectomy or ileal resection by open or laparoscopic techniques. SILS is a new modality which aims to reduce the scars of standard laparoscopy, offering a better cosmetic outcome with reduced incisional pain.¹ It also potentially reduces adhesion formation, port-site infections, hernias and enhances the recovery time. The

Figure 1 CT images demonstrating inflamed Meckel's diverticulum (MD) (red arrow).

Figure 2 Intraoperative image demonstrating (A) the glove port technique which uses a sterile glove for the insertion of three standard ports into three fingers of the glove before creation of a pneumoperitoneum. (B) Exteriorised ileum containing MD. (C) Single 2.5 cm infraumbilical scar.

To cite: Rajendran S, Naqi SA. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2014-204869

glove port technique offers an economically favourable option. It permits the access of multiple standard laparoscopic instruments through a single opening in the umbilicus (figure 2). The main challenges are technical (loss of triangulation, clashing of instru-

ments and lack of manoeuvrability) resulting in a significant longer learning curve and increased operative time.² We demonstrate that SILS is feasible, safe and cosmetically advantageous³ to standard laparoscopy for the treatment of MD in an adult.

Learning points

- ▶ Meckel's diverticulum (MD) is the most common malformation of the gastrointestinal tract and is present in approximately 2% of the population.
- ▶ The most common presenting symptoms are painless rectal bleeding, intestinal obstruction, volvulus, intussusception and abdominal pain.
- ▶ Single incision laparoscopy is feasible, safe and cosmetically advantageous to standard laparoscopy for the treatment of MD in an adult.

Contributors All authors have contributed to the management of the patient and drafting the manuscript. They have read and approved the final manuscript and declare they have no competing interests.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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