

## **SI112: APPLICATION OF ONE-HANDED KNOT TYING IN SCARLESS LAPAROSCOPIC EPIGASTRIC HERNIA REPAIR**

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**Background** Open repair of epigastric hernia might be unesthetic, in this context a few laparoscopic approaches have been described. In this study, we present our preliminary experience with a scarless laparoscopic approach using only a 5mm umbilical incision and a 3mm stab incision by applying a one-handed knot tying technique.

**Materials and methods** Three consecutive patients presenting with epigastric hernia 15 mm or further away from the umbilicus were submitted to laparoscopic repair. A 5-mm 30°-angle laparoscope was introduced through an umbilical trocar and a 3-mm laparoscopic dissector was introduced through a stab incision placed in the right flank. The parietal peritoneum was open, dissected and the fascial defect identified. Differently from previous publications, the closure of the defect was performed using a 3mm needle driver and 2-0 polyglactin thread by applying the one-handed knot tying technique. Intraoperative and postoperative clinical data were collected.

**Results** All patients (2 males, 1 female) were successfully submitted to laparoscopic epigastric hernia repair. Median age at surgery was 7 years (range 5–14). Operative time ranged from 40 to 61 min. Every hernia was successfully closed without any incidents. Follow-up period ranges from 1 to 3 months. No postoperative complications or recurrence was registered. No scar was visible in the patients.

**Conclusions** The application of the one-handed knot tying technique in the scarless laparoscopic repair of epigastric hernia is safe and reliable. The use of one-handed knot tying might be a step forward to the widespread of laparoscopy epigastric hernia repair.

**Key words** laparoscopy, epigastric hernia, one-handed knot, scarless