E-poster

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Multisite hernia treatment:
The robotic approach makes it feasible

Background

The use of robotic surgery for combined abdominal wall hernias, including multiquadrant hernias, is underexplored in the literature. While the prevalence of simultaneous hernias is not well documented, they represent a frequent clinical challenge.

Aims

This study aimed to evaluate the feasibility of a robotic approach for treating simultaneous epigastric, umbilical, incisional, and inguinal hernias.

Materials and Methods

We retrospectively reviewed a prospectively maintained dataset of abdominal wall hernias to identify patients treated for combined hernias. Patients were divided into two groups based on the robotic docking technique.

Results

From January 2020 to December 2024, 30 patients underwent robotic combined hernia repair. Ninety percent were male, with a median age of 64.0 years (56.3-73.3). Most patients (56.7%) had an ASA score of 2. Single docking was feasible for 9 of 30 patients with midline hernias with median diameter of 2.0 cm (1.6-3.0) combined with an unilateral inguinal hernia. Double docking was necessary for 70% of patients with wider midline hernia defect with median diameter of 3.0 cm (2.0-5.0) or bilateral inguinal hernias. No intraoperative complications or conversions were reported.

The median operative time was 158.0 minutes (141.0-160.0) for the single docking and 238.0 minutes (178.0-268.8) for the double docking and the median hospital stay was 2.0 days (2.0-2.0) for the single docking and 3.0 days (2.0-3.0) for the double docking. The morbidity rate was 11.1% for the single docking and 23.8% for the double docking, only one reintervention was needed in the double docking group. Most of the complications in both groups were seromas or hematomas, managed conservatively. At a median follow-up of 15.6 months (6.6-30.4), no recurrences were observed.

Conclusions

Robotic combined hernia repair can be managed with the robotic approach. Single docking offers advantages but is limited to patients with midline defects combined and unilateral inguinal hernias. For midline defects combined with bilateral inguinal hernias, double docking is generally required.