47th ANNUAL INTERNATIONAL CONGRESS EHS 2025 JUNE 4-6 PARIS - FRANCE

Incisional Hernia

Imperial College London

Chelsea and Westminster Hospital NHS Foundation Trust

Outcomes in Robotic Ventral and Incisional Hernia Repair; the first 50 cases

Zeynah ALHADAD[1], Romilly K Hayward[1,2], Jeremy Free[1], Christopher Nicolay[2], Oliver J Warren[1,2]

[1]Imperial College London, United Kingdom; [2]Chelsea & Westminster Hospital NHS Fdn Trust

Background

- The proportion of robotic ventral and incisional hernias repairs is increasing.
- Real-time analyses of patient outcomes provide valuable data regarding feasibility and safety of integrating these techniques in practice.

Method

- Prospective data capture on patients undergoing ventral or incisional hernia repair during the introduction of robotics into a single-surgeon, high-volume hernia practice.
- **Aim**: analysis of perioperative safety profile and efficacy of robotic ventral/incisional hernia repair.

Results

Jan 2023-Dec 2024: **50** robotic ventral and incisional hernia repairs (figure 1)

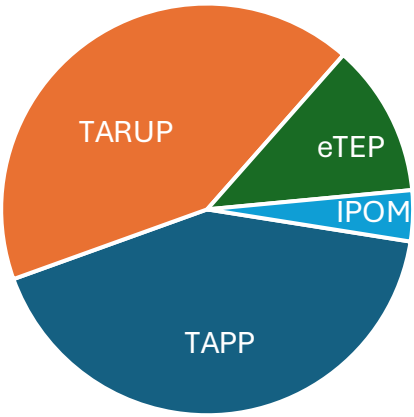

Figure 1: distribution of surgical techniques used in robotic ventral/incisional hernia repair

Demographics:

- Male n=22 (44%)
- Median age **54** (IQR 42–68)
- 34% ASAI, **44% ASAII**, 22% ASA III

Perioperative Outcomes

- Median blood loss: **0mL** (**no** transfusions)
- Conversion to open: **4%** (n=2)
- Median console time= 48 minutes (IQR 36-72).
- Median Length of Stay: **1 day** (IQR 0-1)

Postoperative Outcomes

- **Complication-free** recovery: **90%** (n=45)
- **Major complications** (CDIII/above): **8%** (n=4)
- **Readmission: n=1** (postoperative infection)
- **Return to theatre: n=1** (haematoma evacuation)
- **No** mesh explantations.
- **No** deaths within 60 days.
- **No** early recurrences.
- Median follow-up: 84 days.

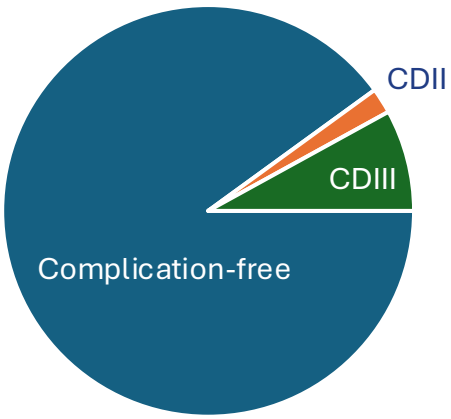

Figure 2: outcomes following robotic ventral hernia repair
CD=Clavien-Dindo Grade

Conclusion

These 50 cases demonstrate the **safe introduction of robotic surgery** into ventral and incisional hernia practice, with **90%** of patients making an entirely **complication free-recovery**, alongside short length of stay, low rates of readmission and return to theatre, and **no** associated mortality or early recurrences.

For queries, please contact zeynah.alhadad@nhs.net