P021 OUTCOME AFTER USE OF THE STAPLED MIDLINE CLOSURE TECHNIQUE AND SELF-FIXATING MESH FOR ABDOMINAL WALL RECONSTRUCTION

Arkadi Rapoport1, Dina Ashatkin2, Alexey Bukin3, Seema Biswas3, Igor Waksman3
1Galilee Medical Center, General Surgery B, Karmiel, Israel, 2Galilee Medical Center, General Surgery Department B, Nahariya, Israel, 3Galilee Medical Center, General Surgery B, Nahariya, Israel

Aim: To evaluate surgical outcomes after introduction to our unit of the stapled opening and closure of the linea alba in reconstruction of the abdominal wall using the GIA linear stapler (linea alba stapling – LAS) and self-fixating mesh for medium and large defects.

Material and Methods: Since 2018, we have transitioned from the Rives – Stoppa (with or without component separation) (R-S) to the LAS technique for abdominal wall reconstruction. We compared our outcomes with the LAS technique with matched historic R-S controls (in terms of defect size, duration of surgery and skin related complications).

Results: Thirty-three cases of LAS reconstruction have been performed in our unit: 15 with defects larger than 10 cm. After exclusion of patients who underwent additional procedures such as adhesiolysis and bowel resection, the mean duration of surgery was 165 min. There were no skin related complications. Comparable cases who underwent R-S reconstruction took 213 min; and, wound infection developed in one patient and skin necrosis in two.

Conclusions: Provisional results indicate significantly lower operative times and incidence of wound complications (including infections and fluid collections). Notable advantages include a shorter skin incision, a small incision in the anterior rectus sheath to introduce the linear stapler rather than the standard laparotomy and lateral abdominal wall dissection (with ligation of perforators) necessary in the R-S method. Self-fixating mesh eliminates the requirement of sutured mesh fixation which may also be associated with more extensive dissection and longer operative times.