O10 REINFORCED TENSION LINE SUTURE RESULTS IN LOW INCISIONAL HERNIA RATE AFTER CRS/HIPEC OPERATIONS

Charlotta Wenzelberg, Ulf Petersson, Ingvard Syk, Peder Rogmark

1Lund University, Department of Surgery, Skåne University Hospital, Malmö, Sweden, 2Lund University, Department of Surgery, Skåne University Hospital, Malmö, Södra Sandby, Sweden

Aim: Cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC) for peritoneal carcinomatosis entails several risk factors for incisional hernia (IH). At our institution fascia closure has been performed in a 4:1 manner with a 2-0 polydioxanone suture (the PDS-group) or a 2-0 polypropylene preceded by a reinforced tension line (RTL) suture (the RTL-group). Our hypothesis was that reinforcing the suture line results in fewer IH at one year.


Results: Of 193 patients, 63 were not evaluable for IH of which two, both in the PDS-group, were reoperated for fascial dehiscence (FD). 130 patients; 83 (45 women) in the PDS- and 47 (23 women) in the RTL-group, mean age 57 years (19-77) remained. RTL-patients were five years younger (54 vs 59), had a higher Karnofsky index and less bleeding (807 vs 1409 ml). No differences regarding sex, BMI, recent midline incisions, excision of midline scar, peritoneal cancer index score, complications (Clavien-Dindo 3b or higher), neo-adjuvant or adjuvant chemotherapy were found. Twelve IH (9%) were found, 11 (13%) in the PDS- and 1 (2%) in the RTL-group (p = 0.055).

Conclusions: Despite many potential IH risk factors, the overall IH-incidences do not seem higher than after laparotomies in general. The RTL-group showed 2% IH compared to 13% in the PDS-group. The PDS-group were further burdened by two FD. The results are clinically relevant, suggesting an advantage with RTL-closure for these patients.