P105 PREVENTION OF INCISIONAL HERNIA WITH A REINFORCED TENSION LINE (RTL) VS PRIMARY SUTURE ONLY IN MIDLINE LAPAROTOMIES: 3 YEARS FOLLOW UP

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Aim: "Incisional hernia (IH) has an incidence of 10-23%, which can increase to 38% in specific risk groups. The objective of this study is to report the results at 3 years of follow-up of the use of the reinforced tension line (RTL) technique compared with primary suture only (PSO) closure in the prevention of IH in high-risk patients undergoing laparotomy."

Material and Methods: "Open randomized controlled clinical trial. Included were patients older than 18 years who underwent midline laparotomy, emergency or scheduled, who were considered high risk, and who completed 3-year follow-up. The patients were randomized 1:1 to the RTL technique or to PSO. The objective was to report the incidence of IH and the complications associated with the closure method. Intention-to-treat analysis and Cox regression were performed."

Results: "A total of 124 patients were randomized; 51 patients from the RTL group and 53 patients from the PSO group finished the 3-year follow-up. The incidence of IH was higher in the PSO group (15/53, 28.3%) than the RTL group (5/51, 9.8%) (p = 0.016, OR 0.35, 95% CI 0.14-0.88, number needed to treat 5.4, log-rank test p = 0.017). The groups were similar in the rates of surgical site infection, hematoma, seroma, and postoperative pain during follow-up."

Conclusions: "The RTL technique is useful in the prevention of IH when compared with PSO in high-risk midline laparotomy patients, and it is not associated with a higher percentage of complications. Clinical trials NCT02136628, retrospectively registered."