



P-384 - BEYOND TRADITIONAL RISK FACTORS: THE IDENTIFICATION OF PREOPERATIVE SERUM FERRITIN AS A NOVEL PREDICTOR OF ANASTOMOTIC LEAKAGE AFTER COLONIC SURGERY

Mohamed Chairi, Mohamed Hassin; Vilchez Fernández, Patricia; Alonso Sebastián, María José; Ron García, Alicia; Madroñal Escribano, Patricia Josefina; Anderson, Per; Rodríguez-Cabezas, María Elena; Huertas Peña, Francisco José

Hospital Universitario Virgen de las Nieves, Granada.

Resumen

Objectives: To identify predictive risk factors associated with anastomotic leakage (AL) following colon resection surgery, aiming to develop a robust early detection scoring system.

Methods: Observational and retrospective cohort study of patients undergoing colon resection with colonic/colorectal anastomosis from January 2018 to December 2023. Demographic, patient, surgery, and outcome data were analysed. Risk factors were identified with both univariate and multivariate analysis. Predictive multivariate logistic regression model was used to create a novel risk score.

Results: A total of 639 patients who underwent colon resection with anastomosis were included in this study. Among them, 62 patients (9.7%) developed AL. Univariate analysis identified age, male sex, preoperative serum ferritin levels > 51.75 ng/mL, minimally invasive surgical approach, extended resection and preoperative C-reactive protein levels > 10 mg/L as factors associated with AL. Multivariate analysis revealed that preoperative serum ferritin (OR 5.55, $p = 0.001$) and preoperative C-reactive protein levels (OR 54.97, $p < 0.001$) were independent and significant predictors of AL. Elaborating a novel risk score, the addition of ferritin to CRP, increased the probability of AL from 10.37% to 28.4%.

Conclusions: Our study has identified preoperative C-reactive protein as a predictor of AL, consistent with findings reported in the literature, and highlights preoperative serum ferritin as a novel predictor of AL following colonic and colorectal anastomosis.