

**EP167****Post-operative serum procalcitonin vs C reactive Protein as a marker of post-operative infectious complications in pancreatic surgery – A systemic review and meta-analysis.****Bhavin VASAVADA**, Hardik PATEL*Hepatobiliary and liver transplant, Consultant hepatobiliary and liver transplant, India*

**Introduction :** The aim of this meta-analysis was to compare the diagnostic accuracy of C reactive Protein and Procalcitonin between postoperative days 3 to 5 in predicting infectious complications post pancreatic surgery.

**Methods :** A systemic literature search was performed using MEDLINE, EMBASE, and SCOPUS to identify studies evaluating the diagnostic accuracy of Procalcitonin (PCT) and C-Reactive Protein (CRP) as a predictor for detecting infectious complications between postoperative days (POD) 3 to 5 following pancreatic surgery. A meta-analysis was performed using the random-effect model and pooled predictive parameters. Geometric means were calculated for PCT cut-offs.

**Results :** After applying inclusion and exclusion criteria 15 studies consisting of 2212 patients were included in the final analysis according to PRISMA guidelines. Pooled sensitivity, specificity, Area under the curve, and diagnostic odds ratio (DOR) for day 3 C-reactive protein were respectively 62%, 67%, 0.772, and 6.54. Pooled sensitivity, specificity, Area under the curve, and diagnostic odds ratio (DOR) for day 3 procalcitonin was respectively 74%, 79%, 0.8453, and 11.03. Sensitivity, specificity, Area under the curve and Diagnostic odds ratio for day 4 C-reactive protein were respectively 60%, 68%, 0.8022, and 11.90. Pooled sensitivity, specificity, and diagnostic odds ratio of postoperative day 5 procalcitonin level in predicting infectious complications were respectively 83%, 70%, and 12.9. Pooled sensitivity, specificity, AUROC, and diagnostic odds ratio were respectively 50%, 70%, 0.777, and 10.19.

**Conclusions :** Post-operative procalcitonin is better marker to predict post-operative infectious complications after pancreatic surgeries and post-operative day 3 procalcitonin has highest diagnostic accuracy.

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