

POSTER PRESENTATION

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Systematic review and meta-analysis of the predictive value of C-reactive protein in postoperative infections

BK Nunes*, RA Lacerda, JM Jardim

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Introduction / objectives

Systematic review and meta-analysis on C-reactive protein (CRP) to determine its value in predicting prognosis / diagnosis of infection in surgical patients.

Methods

The sources were searched: Cochrane, Embase, Lilacs, Pubmed / Medline, Ovid, and references of studies found. Was used the PICO strategy for the definition of descriptors. The data of the studies were obtained through a systematic instrument, and the strength of evidence was classified according to the *Center for Evidence Based Medicine*. For the statistical analysis software was used Meta- Disc version beta 1.1.1 (freeware).

Results

20 studies were included, 18 classified with the highest level of evidence. All reported elevated levels of CRP after surgery and in the presence of postoperative infections (PO), 8 studies a peak CRP between the 2nd and 3rd postoperative day was reported as a normal curve of CRP declined for patients without complications post-operatively, and rising in patients with complications. In four studies it was observed that a value greater than 5 mg /dl in the postoperative CRP is indicative of infection. And the patients with levels above 140 mg/dl in the 4th OP are more likely to develop infections. The meta-analysis revealed a mean of 85% (sensitivity), 86% (specificity), the area under the SROC curve was 0.9060, and odds ratio was 23.56.

Conclusion

CRP, together with other clinical interventions, has high value in the prognosis / diagnosis in the development of postoperative infection.

Disclosure of interest

None declared.

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University of São Paulo, São Paulo, Brazil