

Letter to the editor in response to: The role of preoperative C-reactive protein and procalcitonin as predictors of post-pancreaticoduodenectomy infective complications: A prospective observational study

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We have read the article of Mansukhani et al. [1] with the title of: “*The role of preoperative C-reactive protein and procalcitonin as predictors of post-pancreaticoduodenectomy infective complications: A prospective observational study*” and we have some comments to add to the discussion. We agree in the use of preoperative procalcitonin (PCT) and C-reactive protein (CRP) as predictors of post-pancreaticoduodenectomy (PD) infective complications; the results of this study support that this serum tests could help in the prevention of postoperative infections.

The importance of this study supports one of the ideas that we want to discuss. With this information, we suggested that the PCT and CRP should be available in every hospital or medical center worldwide because of their medical contributions to the correct approach of the patients. The *Mansukhani* study is not the only one that gives a light about the use of these serum markers. Last year, a research from Jiménez-Aguilar, IA concludes that the PCT has a high specificity, low cost, and high benefits for the patients and the health institutions [2].

In 2014, Dominguez-Comesaña et al. made a prospective observational study with 67 patients that were operated of colo-rectal, gastric, and pancreatic cancer. They analyzed the serum levels of PCT and CRP before surgery and in the third post-surgical day to see their accuracy in the detection of postoperative intra-abdominal infection. At the end of the study, they conclude that the PCT values have a significant association with the development of a postoperative intra-abdominal infection in the first 3 days after surgery [3].

Also, the same year, a study done with 100 postoperative acute appendicitis patients concluded that PCT levels should

not be considered as a diagnostic test for this disease; however, the results support its use as a good prognostic and predictive marker for post-surgical infection and can help to take the decision of the right time to enter into surgery [4]. Taking these markers out of the surgical path, in 2015, Bustos and Padilla published an original article in pediatric patients in which they measure the predictive value of the PCT in children with the suspicion of sepsis. The results found that the levels of PCT, CRP, and lactate are a good and reliable predictor of mortality and shock in the pediatric population [5].

Taking into consideration these four studies and their conclusions, in addition to the discussion and the conclusions of your research, we suggested that the use of PCT is essential in the management of postoperative patients to identify complications as soon as possible. Countries and hospitals with low resources must implement the use of PCT because this will improve the patient’s medical and surgical approach.

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