

73365\_Auto\_Edited - check.docx

**Name of Journal:** *World Journal of Gastrointestinal Surgery*

**Manuscript NO:** 73365

**Manuscript Type:** LETTER TO THE EDITOR

**Is it sufficient to evaluate only preoperative systemic inflammatory biomarkers to predict postoperative complications after pancreaticoduodenectomy?**

Preoperative systemic inflammatory biomarkers in pancreaticoduodenectomy

Semra Demirli Atici, Erdinc Kamer

## **Abstract**

Postoperative morbidity and mortality rates are still very high among patients undergoing pancreaticoduodenectomy (PD). However, mortality rates secondary to morbidities that are detected early and well-managed postoperatively are lower among patients undergoing PD. Since early detection of complications plays a very important role in the management of these patients, many ongoing studies are being conducted on this subject. Recent endoscopic retrograde cholangiopancreatography (ERCP) and biliary drainage history of the patient study group is important for comparison of C-reactive protein (CRP), an inflammatory parameter evaluated in the retrospective study by Coppola *et al* published in the *World Journal of Gastrointestinal Surgery* and titled "Utility of preoperative systemic inflammatory biomarkers in predicting postoperative complications after pancreaticoduodenectomy: Literature review and single center experience". Therefore, it may be more appropriate to compare CRP values in randomized patients.

**Key Words:** Pancreaticoduodenectomy; Biliary drainage; Complications; C-reactive protein; CRP; Postoperative pancreatic fistula; Preoperative inflammatory markers

Demirli Atici S, Kamer E. Is it sufficient to evaluate only preoperative systemic inflammatory biomarkers to predict postoperative complications after pancreaticoduodenectomy? *World J Gastrointest Surg* 2022; In press

**Core Tip:** Predicting the complications that may develop after pancreaticoduodenectomy (PD) is very important in the management of patients. Preoperative and intraoperative scoring of patients with the combination of many parameters, such as pancreatic structure, pancreatic duct diameter, preoperative biliary drainage history and laboratory parameters, can guide the estimation of postoperative morbidity and management. Inflammatory biomarkers are easily affected by preoperative treatment. In order to discuss such situations, we think that it would be

more appropriate to prospectively randomize patients in whom dynamic changes of inflammatory parameters can be observed with reported risk factors, including not only C-reactive protein value but also other inflammatory parameters, rather than these preoperative values.

### **TO THE EDITOR**

Coppola *et al*<sup>[1]</sup> recently published a retrospective study on the role of preoperative inflammatory markers to detect the predictive efficiency of postoperative morbidity and mortality in pancreaticoduodenectomy (PD) patients.

Most patients diagnosed with pancreatic cancer undergo preoperative endoscopic retrograde cholangiopancreatography (ERCP) for diagnostic purposes. Preoperative biliary drainage (PBD) can be performed in addition to ERCP in these patients, who may also present with the complaint of obstructive jaundice<sup>[2]</sup>.

PBD itself, duration of the PBD and the ERCP procedure can each increase the inflammatory response<sup>[3,4]</sup>. Coppola *et al*<sup>[1]</sup> found that preoperative C-reactive protein (CRP) level of > 8.81 mg/dL was a high-risk factor for general complications and abdominal collection, which was associated with the inflammatory parameters examined prior to PD operations. Unfortunately, the authors did not report the number of PBD procedures performed on the individual patients included in their study, nor did they provide information on the duration of time before the ERCP procedure was performed for any. This missing information may preclude our ability to make conclusions on the effectiveness of the baseline CRP value, since the recent history of ERCP and the history of PBD are unknown for the study's patients. A history of PBD will cause an increased inflammatory response. In addition, increased postoperative complication rates have been demonstrated in relation to a history of PBD and duration of biliary drainage<sup>[5]</sup>. Prospective randomized controlled trials would be more instructive in determining the efficacy of preoperative inflammatory markers and their importance in the rates of postoperative complications due to PD.

ORIGINALITY REPORT

0%

SIMILARITY INDEX

PRIMARY SOURCES

EXCLUDE QUOTES	ON	EXCLUDE MATCHES	< 12 WORDS
EXCLUDE BIBLIOGRAPHY	ON		