

Assessing Inflammatory Responses in Acute Pancreatitis

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Introduction :

Acute pancreatitis, a sudden inflammation of the pancreas, can range from mild to life-threatening. Although the overall mortality rate is low, severe cases exhibit significant morbidity and mortality, along with marked disturbances in inflammatory biomarkers.

Objective :

The objective of this study is to describe the profile of inflammatory biomarkers during acute pancreatitis.

Materials :

This is a prospective descriptive study conducted between January 2023 and April 2024, involving patients hospitalized for acute pancreatitis. All requests for the measurement of C-reactive protein (CRP), procalcitonin (PCT), and white blood cells (WBC) were collected.

Conclusion :

The approach to diagnosing and prognosing acute pancreatitis has greatly improved. Detecting an inflammatory syndrome by measuring different biomarkers is essential for evaluating the severity of the condition and directing treatment choices.

Results :

- A total of **72** patients were included in the study.
- The average age was **54 ± 21** years.
- The median values for CRP, PCT, and WBC are shown in **Table 1**.

	CRP (mg/L)	PCT (ng/ml)	WBC (10 ⁹ /L)
Median rate	67	2.17	8.8
[Min-Max]	1-302	0.36-48.72	2.2-39.3

Table 1 : Concentrations of CRP, PCT, and WBC

- Among the biomarkers assessed, only the CRP level showed a significant correlation with the clinical and radiological severity of acute pancreatitis (**p=0.01**).
- No significant correlations were found between the severity of acute pancreatitis and the WBC count (**p=0.22**) or the PCT level (**p=0.6**).