**A53 - Analysis of the trend of procalictonin levels in post cardiac surgery patients.**

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**Introduction:**  
The diagnostic utility of procacitonin (PCT) in cardiac surgery remains controversial (1) where the systemic inflammatory response (SIRS) induced by the cardiopulmonary bypass is claimed to be associated with elevated levels of PCT (2). We aim to find a correlation between the level of PCT and the yield of positive blood culture in post operative fever in patients with intensive care unit (ICU) stay more than 24 hours post cardiac surgery.

**Methods:**  
Single center retrospective descriptive study over five years, enrolling patients who stayed for more than 24 hours post-operative, in the cardiothoracic ICU. PCT was assayed immunoluminometricaly prior to surgery and every 48 hours in response to onset of fever

**Results:**  
We screened 501 patients, of which 119 were enrolled in our study. Patients were divided into two groups according to the presence (Group 1), or absence of positive culture (Group 2). The mean PCT was significantly higher in Group 1 (19.0±4.6 versus 9.9±2.7, p=.033). Moreover, patients in Group 1 were associated with prolonged ICU stay, hospital stay and length of mechanical ventilation (p=0.00, 0.00, and 0.01 respectively)

**Conclusion:**  
The results showed that post cardiac surgery bacterial infections were associated with rise of PCT in contrast with patients who develop SIRS. The outcome measures were significantly worse in the culture positive group

**References:**  