A142 - Early prognostic value of serum procalcitonin in post cardiac surgery patients with fever.

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Introduction:
Early outcome in cardiac surgery has been an area of growing interest where the given risks raise several predictive models for assessment of postoperative outcome. [1] Procalcitonin (PCT) emerges as a possible predictive tool in cardiothoracic intensive care unit (CTICU). We aim at testing the predictive power of PCT for early morbidity, prolonged ventilation, ICU and hospital stay, in patients developing early fever after cardiac surgery.

Methods:
A retrospective descriptive study done in tertiary cardiac center, enrolling patients who stayed for more than 24 hours post-operatively in the CTICU. Risk stratification included additive Euro score and PCT immunoluminometricaly prior to surgery and every 48 hours in response to onset of fever.

Results:
We screened 501 consecutive patients who underwent open heart cardiac, of which 119 patients were enrolled in the study. Patients were divided into two groups based on the level of PCT, those with value > 2 ng/ml (Group 1) and those with level < 2 ng/ml (Group 2). Patients in group 1 as compared to Group 2, over the postoperative course was associated with prolonged ICU stay (P=0.04), length of mechanical ventilation (P=0.05), length of hospitalization (P=0.05), acute kidney injury (P=0.04) and culture positivity (P=0.02). Multivariate analysis showed that PCT >2ng/ml was significantly associated with positive cultures. (P=0.023)

Conclusion:
A rise of serum PCT carries the signals of early ICU morbidity and lengths of ventilation, ICU stay and hospital stay.

References: