

PSP (PANCREATIC STONE PROTEIN) AS A MARKER OF INFECTION AND INDEX OF EFFECTIVE ANTIBIOTIC THERAPY

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Introduction

To date, there are few biomarkers routinely used during the management of patients with sepsis: C-reactive protein (CRP) and procalcitonin (PCT). The study aims to evaluate the Pancreatic Stone Protein (PSP) as a marker of response to antibiotic therapy and possibly to find a threshold value capable of guiding the timing of suspension of antimicrobial therapy.

Methods

The study is a prospective observational monocentric study involving patients with suspected sepsis/septic shock. PSP, CRP, PCT and IL-6 values were collected at enrollment (T0), on days 1 (T1), 3 (T3), 5 (T5) and 7 (T7) from enrollment.

Results

It can be seen (*figure 1*) how PSP tends to decrease during hospitalization in step with the improvement of the patient's clinical picture, PCR shows a late increase compared to the other markers. PSP seems to show statistically significant variations in T0-T1; T0-T3; T0-T5; T0-T7; T3-T7, just as PCT shows significant variations in T0-T7; T1-T5; T1-T7; T3-T5; T3-T7. The statistically significant difference in values regarding PSP between T0 and T1, T0 and T3, T0 and T5 could be due to the correct antibiotic therapy.

Conclusion

The trend of PSP and PCT in the population could reflect an earlier variation in PSP levels compared to the other markers taken into consideration, in particular PCT, which although showing significant variations, these are evident later than PSP. In general, a descending trend of PSP and PCT is noted which is reflected by the decreasing trend of SOFA and VIS and therefore by the clinical improvement of the patient. On the basis of these considerations, it is emphasized that PSP and PCT, alone or used in association, could play a useful role also in prognostic terms as well as clinical.

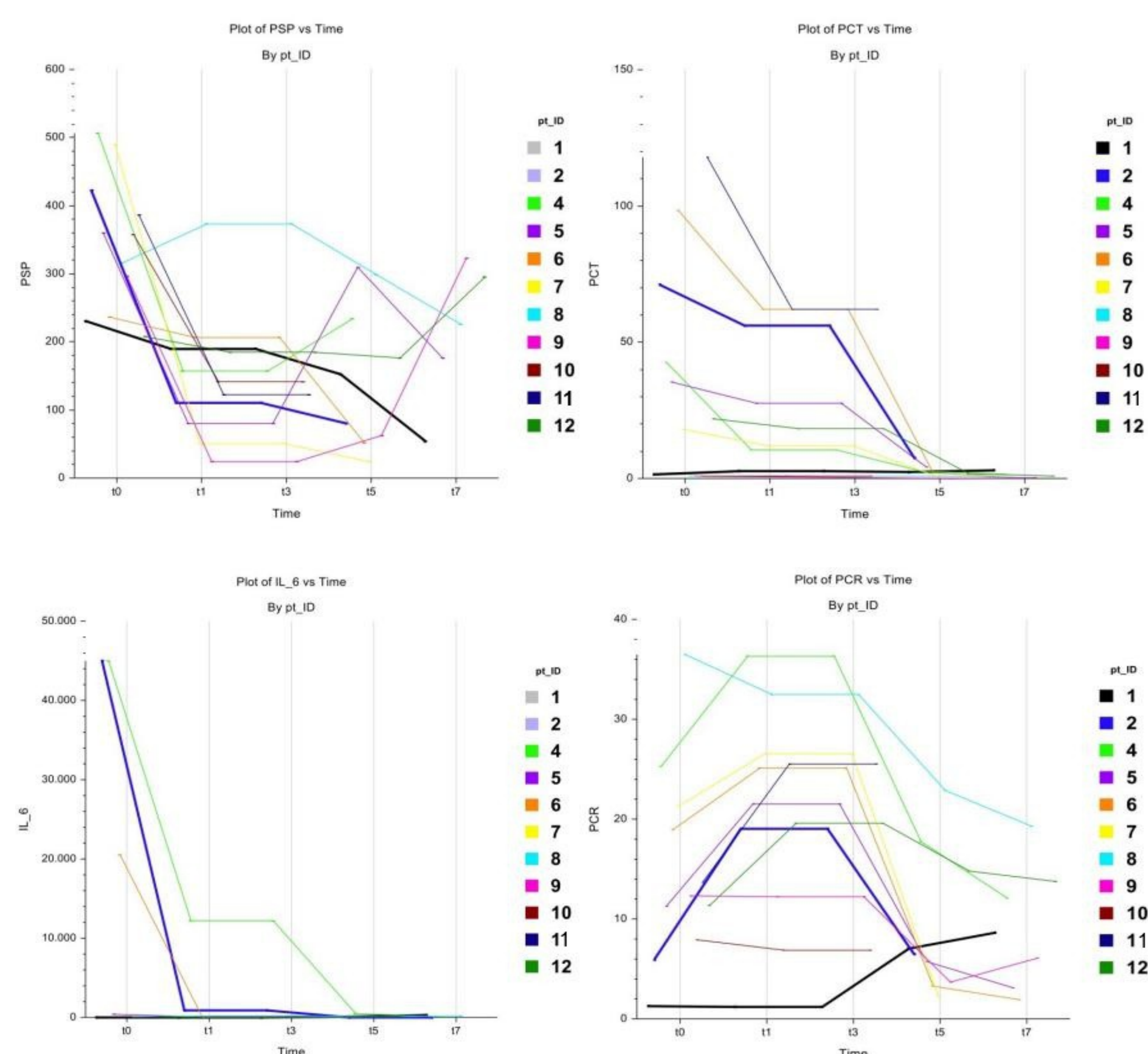


Figure 1: trend of PSP, PCT, IL6, CRP in single patients