CONFERENCE ABSTRACT
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CAN THE DETERMINATION OF PROCALCITONIN IN PREHOSPITAL (EMERGENCY DEPARTMENT) BE A USEFUL AND PRECOCIOUS MARKER IN SEPSIS?

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Key words: sepsis, procalcitonin, prehospital, emergency department, management, infection

OBJECTIVES AND BACKGROUND

The management of sepsis requires a hasty identification of infection, through the application of different dynamic strategies in prehospital and hospital conditions, through the implementation of a number of changes and by measuring the outcome of these changes thus ensuring a decrease in the mortality rate and allowing a rapid identification of the infection

MATERIALS AND METHODS

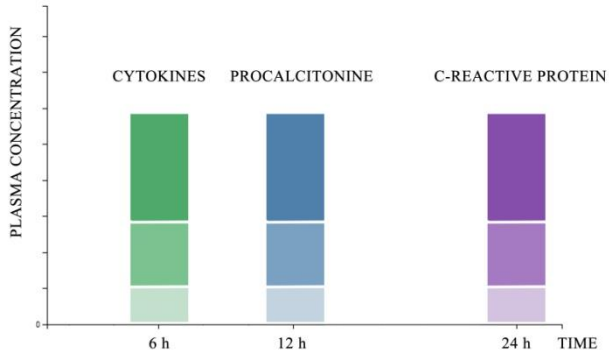
Procalcitonin (PCT) was used as a marker of sepsis in emergency departments. Due to its sensitivity and molecular peculiarities, procalcitonin allows a rapid diagnosis of severe bacterial infections, and is able to differentiate viral infections from bacterial ones. It is also able to differentiate an infectious process from an inflammation, thus sketching a clinically applicable protocol that can be implemented and continuously improved.

RESULTS

The identification of the infectious process in the emergency department within 24 hours leads to a decreased in the mortality rate. Speedy diagnostic methods of infection based on the determination of specific, rapidly measurable, markers – procalcitonin in our case - can confirm the presence of sepsis and its' outcome.

CONCLUSIONS

Prehospital determination of procalcitonin (PCT) is recommended in the early diagnosis of sepsis and is also an indicator of its severity, starting from a solid theoretical database that is justified by the efficiency and effectiveness of its usage.



Graphical abstract: Laboratory changes of inflammatory response

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