

POSTER PRESENTATION

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Mean platelet volume as a marker of sepsis in patients admitted to intensive therapy

A Sanchez-Calzada^{1*}, JL Navarro¹, L Delgado¹, O Torres¹, A Torres², R Gastelum¹, P Romano¹, E Monares^{1,3}, C Galindo³, G Camarena¹, J Aguirre¹, J Franco¹

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Introduction

The majority of patients admitted to a intensive care unit has signs of systemic inflammatory response (SIRS) with or without sepsis. Since the difference between morbidity and mortality of these two populations is very different is a priority to have markers in order to early differentiate between SIRS with sepsis (S+) and SIRS without sepsis (S-).

Objectives

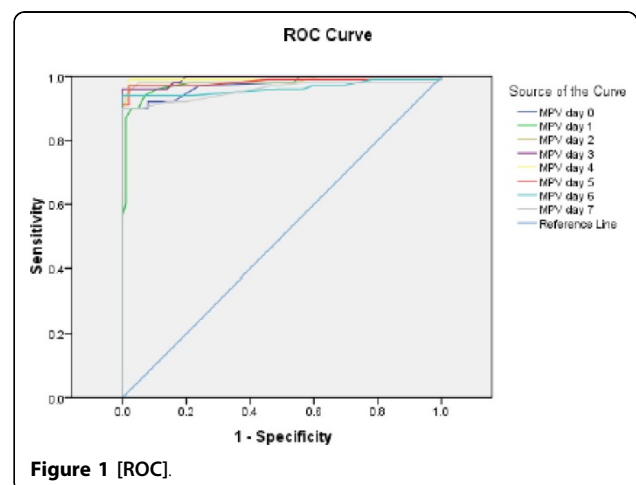
To investigate the usefulness of the Mean platelet volume (MPV) for differentiating between S- and S+.

Methods

Admitted patients with SIRS signs admitted to two intensive therapies from January 2012 to December 2014 were prospectively evaluated and classified in S- and S + according to the results of blood cultures, imaging studies, procalcitonin > 2 ng / mL and the opinion of two certified intensivists outside the study.

Results

A total of 202 cases were included. Gender distribution with 51% (103) females. With a mortality of 12.4% (n = 25). With 50% (n = 101) of the population in the S- group and 50% (n = 101) in the S- group. The only statistically significant differences between the two groups was the SOFA score: S- 8 +/- 2; S + 11 +/- 3 (p < 0.05) and mortality, where all the cases were reported in S +. ROC analysis of MVP was conducted with a cutoff value of < 7.7 fl within day 0 AUC 0.974 (CI 0.955-0.994, p < 0.05), at day 1 AUC 0.970 (0961-0997, p <



0.05), at Day 2 AUC 0.987 (0.971-1.00, p < 0.05), and at Day 3 AUC 0.941 (0903-0978, p < 0.05).

Conclusions

MVP is a useful tool to differentiate between patients with sepsis and those without sepsis. The best way to rule out sepsis is with MVP < 7.7 fl at days 0 and 3.

Authors' details

¹ABC Medical Center, Intensive Care, Mexico, Mexico. ²ABC Medical Center, Orthopedics, Mexico, Mexico. ³Hospital San Angel Inn Universidad, Intensive Care, Mexico, Mexico.

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¹ABC Medical Center, Intensive Care, Mexico, Mexico
Full list of author information is available at the end of the article