Predicting Mortality - The Simple Intensive Care Studies-I

A clinical examination is usually made by caregivers as a way to detect signs of deterioration in critically ill patients. However, there have been some inconsistencies when it comes to the prognostic value of this exam.

A recent prospective cohort study of 1075 patients assessed whether there was an independent association with the findings from clinical examinations and 90-day mortality for patients in the intensive care unit.

Researchers were able to use logistic regression analyses for multiple variables to note any independent factors which could indicate 90-day mortality. The results from the clinical examinations were found to give significantly accurate outcomes. Independent associations were found between 5 of the findings from the exam, out of a total of 19, and 90-day mortality.

The findings of high respiratory rate, high systolic blood pressure, reduction in core temperature, altered consciousness and reduced urine output are all examples of skin, renal and cerebral hypoperfusion. Researchers hypothesised that this could be an indication of illness severity and therefore predict the outcome of the patient after 90 days.

Results from the clinical examination were found to be of similar value to SAPS-II (Simplified Acute Physiology Score-II) and APACHE-IV (Acute Physiology and Chronic Health Evaluation-IV). Additionally, findings from the clinical examination performed significantly better than the findings from SOFA (Sequential Organ Failure Assessment) scores.

The reasonable discriminative value for clinical examinations has been confirmed, however, researchers recognised that the treatment strategies could differ between institutions. It was, therefore, suggested that a randomised study could show a clearer picture of the prognostic value of the clinical variables.

Source: Critical Care Medicine
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