Abstract

Introduction: *Critically ill obstetric patients represent an interesting group with unique characteristics, whose management is challenged by the presence of a fetus, an altered maternal physiology and diseases specific to pregnancy. The Acute Physiology and Chronic Health Evaluation II (APACHE II) and simplified acute physiology score (SAPS II) scores, etc.; have been used to assess the severity of illness and to predict mortality and morbidity in critically ill obstetric patients, with conflicting results.*

Aim of study: *This is a prospective analytical study of obstetric patients admitted to the ICU, aiming at assessing the utility of SAPS II and APACHE II in the prediction of maternal mortality and morbidity.*

Patient and Methods: *60 consecutive obstetrically ill patients were studied for complete physical examination, reporting the hemodynamic data in the first 24 hours and full laboratory investigations, and then all these data were applied to SAPS II, APACHE II and APACHE IV scores.*

Results: *60 female patients with mean age of 27±6 y (range of age between 18 y to 42 y), only 3 patients died (5%) and 57 patient survived (95%),the mean length of hospital stay in the ICU was 2.77±2.27 days (range 1 to 15 days), The mean SAPS II score was 21±13, the mean APACHE II score was 16±7, the mean APACHE IV score was 51±21, The mortality prediction by SAP II, APACHE II, and APACHE IV scores were 8.5%, 26.7% and 6.3% respectively, The mean hospital "ICU" stay in survivors was 2.7±2.3, while that of non survivors was 2.67± 2.1 days showing no significant difference P value (0.938), The mean SAPS II, APACHE II, APACHE IV scores in survivors were 19.5±10.2, 15.4±6.3, 48.2±16.2 respectively, while mean scores among the non survivors were 56.3±18, 28.6±2.6, 107.3±29 respectively, showing higher significant values in non survivors P values (0.0001, 0.001 and 0.0001) respectively, scores were regressed on mortality status using logistic regression analysis. The predictability was assessed by goodness-of-fit test and receiver operated characteristic curve.*

Conclusion: *APACHE IV and SAPS II scores have more accurate mortality predictability than that of APACHE II score, while APACHE II score was more accurate regarding morbidity.*

Key words : *SAPS II - APACHE II - obstetric emergencies .*