ABSTRACT

Background & Objectives

Organ failure worsens outcome in sepsis. The Sequential Organ Failure Assessment (SOFA) score numerically quantifies the number and severity of organ dysfunction. We examined the utility of the SOFA score and its derivatives for assessing outcome of patients with sepsis in surgical unit.

Design

Prospective non-interventional observational study in an urban tertiary care centre

Methods

All patients with suspected/confirmed sepsis admitted in the surgical unit were included in the study. This included operated, non-operated and trauma patients. Patients had to fulfill two or more criteria of systemic inflammation. The parameters involved in calculating the SOFA score were collected on a daily basis. The worst value of the day was taken. The score was calculated till discharge, mortality or day 7 of admission whichever was the earliest. The SOFA at admission was labelled T0 and at day 2 (i.e. at 48 hours) was labelled T48 and at day 4 (i.e. at 96 hours) was labelled T96. The difference calculated as Delta SOFA. The Total and Mean SOFA were also calculated. These were compared with the Outcome of the patient.

RESULTS

A total of 100 patients in the age group 17 yrs to 85 yrs, which included 69 male and 31 female were enrolled over 1 year. All were treated as per
protocols. Mortality was 47%. Delta SOFA values when increased from the previous value, there is a greater chance that the patient may succumb to his illness. Mean SOFA value also proved to be an independent predictor of mortality. A value of more than 11 showed a sharp rise in mortality. Total SOFA score is also statistically significant in predicting mortality, irrespective of the disease state. A Total SOFA score of more than 33.5 is associated with increased mortality.

**Interpretation & Conclusion**

The SOFA score provides potentially valuable prognostic information on in-hospital survival when applied to patients with sepsis. The total SOFA and Mean sofa are better predictors of mortality.