Abstract

Background: Thermal injuries are a major cause of morbidity and mortality in Kenya. Though a lot is known about burns, the morbidity patterns and mortality rates of burns in this country have not been established. This study was designed with the general objective of investigating the outcome of moderate and severe burns managed at the Kenyatta National Hospital (KNH). It was also the aim of the authors to try to validate an existing simple clinical burn injury score, based on the Abbreviated Burn Severity Index (ABSI) score. Methods: This was a retrospective study of burn patients treated at KNH between January 1999 and December 2000. The main parameters studied included the age, sex, and depth of burn injury, inhalation injury and percentage total burn surface area (%TBSA). Other parameters recorded were the type of burn, pre-morbid or co-morbid illnesses, specimen culture and sensitivity and the length of hospital stay. Single variable analyses (χ2-test) were used to determine the value and influence of single variables on burn mortality. Multiple stepwise logistic regression analysis was performed on all the variables used in the ABSI score, as well as on hospital stay and type of burn (scald or flame), to determine their influence on burn mortality. Results: Out of the 1205 patient records retrieved, 1157 satisfied the inclusion criteria for the study. The findings confirmed the role of percentage total burn surface area, associated inhalation injury and depth of burn as the strongest prognostic variables (multivariate analysis); while age and sex have prognostic significance on single variable analysis. This data was then used to validate the ABSI score, which performed very accurately as a prognostic score. Conclusion: It is recommended that the ABSI score be adopted into clinical practice in this country, as an objective and accurate predictive clinical score.