

ABSTRACT

Keywords:

Electrical, burns, injuries, demographics, epidemiology, India, retrospective.

Title:

“AN OBSERVATIONAL EPIDEMIOLOGICAL ANALYSIS OF PATIENTS ADMITTED WITH ELECTRICAL BURN INJURIES OVER LAST 6 YEARS”.

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Aims & Objectives of the study: To find out the incidence, demographic profile and pattern of electrical burn injury. To study the associated complications, treatment methods required and final outcome of the patients sustaining electrical burn injuries. To audit and improve the treatment protocols for future admissions.

Materials & Methods: Ninety-eight patients were included in this study admitted with electrical burns from January 2008 till December 2014. The demographic data and clinical parameters

including, treatment done, associated complications, final outcome were recorded. The data obtained was analyzed by various statistical methods and results were obtained.

Results: Majority of the patients were males, between the ages 21 years and 40 years, working as labourers (31.6%), followed by electricians (26.5%). Most patients (60.2%) had involvement of <20% total body surface area (TBSA), still 75% required surgical intervention. Overall, mortality rate was low (5.1%) but 29.5% patients required amputations of a limb (or a part of limb). Mean duration of hospital stay was 32.13 days. Most patients did not require plasma or blood transfusions. The requirement of blood transfusions increased with the number of surgeries.

Conclusions: From our study, we can conclude that there is increasing trend of electrical injuries over the last three years. Early referral to higher centre as soon as possible and timely intervention can help prevent amputations and thus avoid permanent disability. Though the overall mortality is very low, the short term and long term consequences and subsequent rehabilitation phase make electrical burn injuries a challenge to manage. Awareness about the safety measures, avoidance of handling of electric wires by persons who are not specifically trained for the same and tertiary care are all important for the prevention and management of these injuries.