ABSTRACT

Background:

Snakebite is a major health problem in India. Acute renal failure is an important cause of morbidity and mortality in snake bite patients, especially in tropical countries like India.

Aims:

This study was performed to find out 1) early predictors of acute kidney injury in snakebite patients at the time of hospital admission 2) incidence of acute kidney injury in snakebite patients.

Materials and Methodology:

The present study is a hospital based prospective observational study done in 100 consecutive patients, with history of poisonous snakebite, admitted to Coimbatore Medical College Hospital, Coimbatore, tertiary referral centre in South India. Relevant history, physical findings and investigations were recorded using a standard questionnaire. Analyses were performed by software Statistical Package for the Social Sciences (SPSS)

Results:

Incidence of acute kidney injury was 29%. Development of acute kidney injury was independently associated with local swelling ($P$ value = 0.000), bleeding from bite site($P$ value = 0.000), 20 min whole blood clotting test (20 min WBCT) ($P$ value = 0.000) and oliguria($P$ value = 0.000)
Conclusion:

Incidence of acute kidney injury in our study is comparable to previous studies. Early prediction of acute kidney injury development in snakebite patients can be done with local swelling, bleeding from bite site, 20 min whole blood clotting test (20 min WBCT) and oliguria. Recognition of predictor signs is essential for clinical management and early referral which could lead to a significant decrease in morbidity and mortality. Further long term studies might help to assess predictors of renal failure in snake bite envenomation.

Keywords: Acute kidney injury, early prediction of acute kidney injury, 20 min WBCT, snakebite, local swelling, bleeding from bite site, oliguria