



Russell's viper bite in Bangladesh

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Objective: Venomous snake bite is an important public health hazard in south Asian tropical countries including Bangladesh. Russell's viper was seemed to be rare in Bangladesh. Anecdotes suggest that Russell's viper (*Daboia russelii*) was an important cause of mortality in the 1920s, but no case of envenoming by this species has since been reported in Bangladesh. From 2013, several cases of Russell's viper bite have been reported in the southern-western part of Bangladesh.

Methods: This study was carried out among of all admitted cases of Russell's viper bite in the Rajshahi Medical college Hospital (18 cases) and Patuakhali district hospital (1 case) from March 2013 to June 2017. All cases were underwent structured clinical assessment and antivenom was given in envenomed cases. Russell's viper snake bite was confirmed either by the brought specimen, and/or clinical history and examination with 20 minutes whole blood clotting test.

Results: The most common mode of presentations was local swelling and bleeding manifestation. Almost all patients consulted traditional healers before admission and had tourniquet applied. The complications noted were acute kidney injury (AKI), myotoxicity and eventually multi-organ failure to death (in 4). In Rajshahi almost all patients had AKI, among them 9 patients required dialysis but no neurological manifestation was present. In Patuakhali, the patient was presented with multiple extensive distant ecchymoses, ptosis, ophthalmoplegia that was not fully corrected by available polyvalent anticoagulant.

Conclusion: As Russell's viper is a newly recognised cause of venomous snakebite in Bangladesh. Prompt and appropriate identification of snake is essential, and cause for its re-emergence need exploration. The presenting features of Russell's viper bite seems to be different between two parts of Bangladesh, suggests differences in venom composition requiring investigation. Hospital admission was delayed by all patients seeking traditional treatment. Community awareness, training of healthcare staff, and dialysis capacity should be improved in affected areas and also needs geographical survey.