RUSSELL’S VIPER BITE AND ITS IMMEDIATE OUTCOME IN BANGLADESH

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Background: Russell’s viper (Daboia russelii) is found in Asia, throughout Indian subcontinent, much of South East Asia, Southern China and Taiwan. 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. Russell’s viper bite has been reported and it is the one of the common snake bite at Rajshahi region which has great morbidity and mortality as well.

Methods: This is a prospective observational study was conducted in the Medicine department of Rajshahi Medical College Hospital. We treated total 171 patients from 2013 to December 2022. Russell’s viper envenomation confirmed either by brought dead or live snake specimen, photograph, bedside 20MWBCT and other symptoms.

Results: In the management of RV bite patient in the Rajshahi Medical College Hospital, we found that most of the patients are delayed in getting hospitalization after bite due to visit to traditional healer. In our study 96% were male, and 4% were female, mostly farmer and 90% bite site in the lower limb during work in the paddy field. The clinical presentation was pain and local swelling (100%), blood oozing from local site (77%), bruising (44%), haematuria (25%), hypotension (30%), oliguria and few with DIC. In lab findings, coagulopathy (24%), raised CPK (60%), 67% Patients had AKI (raised creatinine and RBC in urine), among them 50% needed dialysis. Few patients also develop multiorgan failure. All patients received polyvalent Antivenoms supplied by GOB (Incepta Bangladesh Ltd.) which works against cobra, krait, Russell’s viper bite. Despite maximum available support at RMCH, around 30% patient died. Conclusion: It’s high mortality indicates that this polyvalent antivenom might not be working properly. We may need to increase the initial dose or we need to provide monovalent antivenom specific to RV in Bangladesh and early treatment at Upazila Health Complex to reduce the rate of death due to Russell’s viper bite.

Key words: Russell’s viper, Polyvalent Antivenom, AKI, RMCH

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