

Epidemiology and clinical profile of cobra (*Naja naja*) envenomation in wet zone of Sri Lanka

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Cobra (*Naja naja*) is widely distributed in Sri Lanka, but its bites are less common compared to viper bites. Its envenoming could be deadly due to neurotoxicity and severe local tissue necrosis.

We describe a series of 12 patients with cobra bites in the Provincial General Hospital, Ratnapura, Sri Lanka over two years from October 2013. Of the 12 bites, offending snakes were available in 5 (41.6%) cases for identification and in the rest patients have identified cobra as the responsible snake.

There were 8 (66.6%) males and 4 (33.3%) females including a pregnant mother of 37 weeks gestation. The age of these patients ranged 17-72 years. All bites occurred during day time (9am-6pm). The bitten sites were hands (5; 41.6%), feet (4; 33.3%), legs (2; 16.6%) and face (1; 8.3%). Four (33.3%) patients were bitten indoors, 3 (25%) while working at home gardens, 2 (16.6%) while working in tea estates and walking on foot paths and 1 (8.3%) while working in a paddy field.

Four (33.3%) patients had dry bites and 8 (66.6%) had envenoming. Of envenomed patients 6 (50%) patients developed neurological signs. Five had ptosis, double vision and ophthalmoplegia, 3 had respiratory failure and 2 had dysphagia. Four (33.3%) patients developed coagulopathy (positive -whole blood clotting test, PT and aPPT) and myotoxicity (muscle pain and tenderness) whereas 3 (25%) had local tissue necrosis. Local effects were pain (11; 91.6%), swelling (8; 66.6%) and bleeding (3; 25%). Two patients (16.6%) needed ICU care and 2 died. Antivenom serum (AVS) was administered to 7 (58.3%) patients of them 4 (57.1%) developed allergic reactions.

We observed coagulopathy which was not a well established manifestation in cobra envenoming. But in order to confirm this, there should be a toxin analysis regarding cobra venom. With the occurrence of coagulopathy and low incidence of local tissue necrosis suggests possible geographical variation of venom composition.

Key words: cobra, Naja naja, envenomation, coagulopathy, Sri Lanka

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