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Bite by Monocled Cobra, *Naja kauthia,* in Bangladesh

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Objective: Neurotoxic snakebite is the leading cause of envenomation and snakebite deaths in Bangladesh. Bites by the monocled cobra, *Naja kaouthia*, are particularly common. The literature on clinico-epidemiolgical features and outcome of confirmed cobra bites from Bangladesh is limited. In this communication we present the clinico-epidemological aspects of confirmed cases of cobra bite treated in 'snakebite clinic' Chittagong Medical College Hospital (CMCH), Chittagong, Bangladesh.

Methods: All admitted cases of snakebite in CMCH over 39 months (199-2002) underwent a structured assessment and were managed using a common protocol including clinical assessment, provision of antivenom in envenomed cases, and access to assisted respiratory support. Confirmation was either by identification of brought specimen and/or detecting *N. kaouthia* venom antigens in patients' serum.

Results: Seventy confirmed cases of cobra bite out of 884 cases of snakebite were found. Bites were most common in the early morning and evening during the monsoon (May–July). Ligatures were routinely applied to the bitten limb before admission. Thirty-seven patients consulted traditional healers, most of whom made incisions around the bite site. Fifty-eight patients experienced severe neurotoxicity and most suffered swelling and pain of the bitten limb. The use of an Indian polyvalent antivenom in patients exhibiting severe neurotoxicity resulted in clinical improvement but most patients experienced moderate-to-severe adverse reactions. Antivenom did not influence local blistering and necrosis appearing in 19 patients; 12 required debridement. Edrophonium significantly improved the ability of patients to open the eyes, endurance of upward gaze, and peak expiratory flow rate suggesting that a longer-acting anticholinesterase drug (neostigmine) could be recommended for first aid.

Conclusion: The study suggested that regionally appropriate antivenom should be raised against the venoms of the major envenoming species of Bangladesh and highlighted the need to improve the training of staff of local medical centers and to invest in the basic health infrastructure in rural communities.