Snake Bite in Bangladesh
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Snake bite is a terrifying acute medical emergency situation in rural Bangladesh in particular. Estimate was 4.3 bites per 100,000 populations with~2000 deaths per year following snake bite. This is known to be a health hazard for centuries, which was under the preview of traditional healers, 'Ohzas' who used to demonstrate a number of rituals for providing treatments which have been found to be useless, at times harmful. Despite an important health hazard in Bangladesh it received virtually no appropriate attention from the planners and professionals.

Snake bite is a result of an unfortunate accidental interaction between a snake and a human victim. Most often the victim is an active poor young people who get the bite during day to day occupational activity like cultivation, fishing, plantation, wood collection, watching the 'crop' or 'garden' lying in floor or even during rural foot walk. Sometimes it happens in home surrounding like while on chicken or pet bird care.

Pain in the bite site and panic following bite compel the victim or near by attendant to provide whatever known first aid remedy available in place may be cutting by non sterile sharps, applying unnecessary tight torniquette by whatever material available in the vicinity, various local harmful remedies, recitation of verses or 'mantras', and seeking treatment from 'snake doctors' who usually provide their showman oriented treatment and hardly ever advice for quick scientific treatment. As most of the snake bites are non-venomous bites some of them recover with the treatment so far provided.

The effect of venomous bite result in development of local swelling, prolonged bleeding, hypotension, paralysis, skeletal muscle damage, renal failure, cardiac abnormalities. In the initial period following bite clinical distinction between venomous bite and non-venomous bite may not be possible with certainty when close observation will provide clues if there is any features of envenomation on specific system. The major venomous snakes of Bangladesh are cobras, kraits, green pit vipers and sea snakes in coastal areas. Green pit vipers of the genera trimeresurus (popularly known as Gaaltawa) are available in forested areas of the country like greater Chittagong, and Sylhet areas. Bite following green pit viper result in mild type of effects like gradually expanding local swelling, bleeding, echymosis; cobra bite result in paralysis of 'myasthenic' type with local swelling and subsequent soft tissue necrosis; krait bite result in paralysis with out significant local effects; sea snake bite causes mild type of paralysis with skeletal muscle damage and varying degree of renal failure. Cobra and krait bite may cause rapid paralysis requiring artificial respiratory support due to involvement of diaphragm.

Appropriate first aid includes immobilization of the bitten limb, non-tempering the bite site and quick referral for evaluation for envenomation. Attention of respiratory function and if needed providing support by Ambo bag while on transfer is essential as large number of snake bite have been found to die due to presumed respiratory paralysis before arrival to hospital.

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Editorial

Hospital management includes differentiation of venomous from non venomous bite by looking for clinical criteria, bed site 20 min whole blood clot test, species identification by careful examination of brought specimen if any and if facilities available venom antigen detection in bite site, serum and urine. In Bangladesh, method for detection of venom-antigen is not available for routine clinical practice. Based on clinical criteria of envenomation polyvalent anti snake venom, the specific drug for treatment of venomous snake bite is provided depending on availability. The anti-snake venom (ASV) is not manufactured in Bangladesh, and supply is being given in government hospital, which is manufactured in India either lyophilized or serum form. The supply of ASV in public hospital is irregular and is not available in private hospitals and is not easily available in the private market as well. Even if it is available, often not affordable by the patient's party who are poor. For cobra bite usual dose is 10 vials, for krait bite more doses are required. ASV is associated with potential immediate side effects like anaphylaxis which should be treated with adrenaline, hydrocortisone, chlorphenirmanine and H2 blocker. In neurotoxic snake bite ancillary treatment with neostigmine-atropine is provided which may be the only supportive treatment in absence of ASV. Despite use of ASV a proportion of patients following neurotoxic snake bite may develop respiratory paralysis which requires assisted ventilation for variable period of time with successful complete recovery.\textsuperscript{3,4}

One year, 61 patients with 9 venomous bites were treated in Dhaka Medical College Hospital in 2004. Twelve of them required ASV, 04 of them required assisted ventilation, three victims of venomous bite died two of whom were brought dead. During the flood of 2004 DGHS recorded 99 death following snakebite through the existing surveillance system.

Being a rural poor man's life threatening health condition snake bite deserves special attention for saving young active earning members of the community conforming our pro poor strategy and commitment of Millennium Development Goal. Probably we neither public nor private sector are doing enough to appropriately manage such a simple acute emergency. By ensuring free supply of logistics including ASV in all public hospitals of the country and by having trained health professionals in all such places we can demonstrate our eagerness not to keep snake bite a 'neglected disease' any more. Inability to provide such bare requisite will continue to encourage treatment seeking from 'Ohzas'.

Further Reading