Neurotoxicity related to snakebite: treatment, and prevention

Abstract

Highest rates of snake envenoming and mortalities in South Asia, Southeast Asia, Sub-Saharan Africa with India reporting the most deaths. World Health Organization listed snakebite as a neglected disease. Clinical manifestations of snakebite include overwhelming fear, nausea vomiting diarrhea, vertigo, fainting tachycardia, and cold, clammy skin. Most snakes cause neurotoxicity. Paresthesia throughout the body, as well as difficulty in speaking and breathing. Several other neurological features have been reported after snake envenomation which is likely to be direct neurotoxic effects. Mechanisms of many these acute manifestations are not clear. Myokymia has been reported mainly from United States following rattlesnake (Crotalus spp). Altered consciousness and deep coma has been reported in 64% of patient after common krait envenomation. Delayed neurotoxicity also been reported. Anti-venom treatment should be given as soon possible, low dose anti-snake venom (ASV) is not inferior to high dose ASV. Improvement in neurotoxicity has been reported when anti-venom had been administered early. Prevention by avoiding areas heavily infested with snakes. Bite from a dead snake often contains large amount of venom. There is an urgent need for better treatment in neurotoxic envenoming.