



THE TREATMENT OF THE SCORPION ENVENOMING SYNDROME: THE SAUDI EXPERIENCE WITH SEROTHERAPY

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M. ISMAIL. The treatment of the scorpion envenoming syndrome: the Saudi experience with serotherapy. *Toxicon* 32, 1019-1026, 1994.—A protocol for treatment of scorpion sting based mainly on antivenom therapy was applied nation-wide in Saudi Arabia. At least 5 × 1 ml ampoules of antivenom diluted in 20-50 ml saline were injected slowly i.v. in all patients confirmed to have scorpion stings or suspected stings with systemic manifestations. A list of drugs was specified to be used in adjunctive therapy, when required. Analysis of 1033 cases at Al-Baha region, 791 cases at Al-Qassim region and more than 600 cases from 12 central and specialist hospitals in the Central Province revealed impressive results. Except for a 12-year-old boy who was inadequately treated with antivenom and died from pulmonary oedema, haematemesis, severe neurotoxicity and circulatory failure, no other fatalities occurred. The incidence of pulmonary oedema, hypertension, hypotension, cardiac dysrhythmias and neurological symptoms requiring drug therapy following antivenom administration was very slight. The period of stay in the hospital was reduced; most patients were symptom-free within 1-2 days. The early reaction to antivenom administration was lower than expected, amounting to 6.6% and 1.7% among Al-Qassim and Al-Baha victims, respectively. The severity of the reaction in both groups was low, consisting mainly of skin rashes, urticaria, wheezing and bronchial secretion, but no anaphylaxis. About 13.8% of Al-Baha victims were previously treated with antivenom but only 1.7% of the patients showed positive skin tests. This might be due to the low protein content of the antivenom and the action of the venom in releasing massive amounts of catecholamines.

DIFFERENT approaches to the treatment of scorpion envenomation have been advocated by different investigators. Thus, FREIRE-MALIA and CAMPOS (1987, 1989) recommended treatment of mild cases of envenomation with symptomatic measures and/or antivenom, and severe cases with symptomatic measures, support of vital functions and i.v. injection of antivenom. They stated that with this kind of treatment the mortality rate was decreased to 0.26%. SOFER and GUERON (1988), however, recommended close monitoring of patients, especially children, for pulmonary or central nervous system complications. Should any of these complications dominate the clinical picture in the presence of systemic hypertension, i.v. hydralazine may have a beneficial effect.