



## CLINICAL STUDY OF SCORPION STING

## Pediatrics

**Dr. Neeraj Gupta**

Associate Professor, Department of Paediatrics, R.D. GARDI MEDICAL COLLEGE, Ujjain MP, India-456006.

**Dr. Jyoti Singh\***

Ex Professor and Head of department, Paediatrics, Shyam shah medical college, Rewa (M.P.). \*Corresponding Author

## ABSTRACT

Cases with history of Scorpion sting who reported to hospital were included in the study group. A total of 70 patients in 2 years were taken as study group and retrospective 50 patients in the earlier 2 years were taken as control group. Conclusion was (1) incidence of scorpion sting was maximum in pre school age group (50 %) in both study and control group. (2) Incidence of scorpion sting was maximum in males in both case (67.1%) and control group (62%). (3) Maximum cases were reported in summer (30%) and rainy season (32%). (4) most of the cases were stung during evening or night (57.14%)

## KEYWORDS

Scorpion sting, prazosin.

## INTRODUCTION

The present study entitled “ Clinical study of Scorpion sting “ was undertaken in the Department of Pediatrics, S. S. Medical College and G. M. hospital Rewa (M. P. ) with the aim of studying the epidemiological factors, clinical features, radiological and ECG changes and efficacy of prazosin in reducing the morbidity and mortality after scorpion sting. A retrospective comparison with controls who received conventional treatment in previous 2 years of study was made regarding mortality. Cases with history of Scorpion sting who reported to hospital were included in the study group. A total of 70 patients in 2 years were taken as study group and retrospective 50 patients in the earlier 2 years were taken as control group.

## MATERIAL AND METHODS

The Present study “ Clinical Study of Scorpion sting “Was carried out in department of Paediatrics , S. S. Medical College and associated G.M. Hospital , Rewa (M.P.) during a period of two years. Seventy cases were taken in study over a period of 2 years. Criteria of Case Selection (1) History of scorpion sting by patient himself or by attendants. (2) If scorpion was not seen then signs and symptoms suggestive of scorpion sting were taken.

## RESULTS

The results drawn from present study were as follows : (1) incidence of scorpion sting was maximum in pre school age group (50 %) in both study and control group. (2) Incidence of scorpion sting was maximum in males in both case (67.1%) and control group (62%). (3) Maximum cases were reported in summer (30%) and rainy season (32%). (4) most of the cases were stung during evening or night (57.14%). (5) Most common sting was extremities and in this also lower extremities were more commonly involved (58.57%). (6) Most of the cases reported had only one sting (95.71%) (7) Most common scorpion found in Rewa region is Brown scorpion (*Mesobuthus Tumulus*). (8) Most common reason of delay in hospitalization was transportation and other added factors such as belief in traditional treatment and private treatment at primary level were present in 77.14 % cases. (9) Common clinical features in decreasing order of frequency are profuse perspiration (97.14%), excessive salivation (91.42%), pain (91.42%), vomiting (77.14%), priapism (58.57%), tenderness at local site (57.14%), dyspnea (50%) and swelling at local site (12.85%). (10) Maximum cases presented in sympathetic phase (42.8%) than hypokinetic phase (27.14) and minimum cases presented in parasympathetic phase (21.42). Statistically significant mortality was seen in those patients who had Hypotension (14.28 %) as compared to Hypertensive patients (2.50%). From statistical inference highly significant reduction in mortality from 34% in control group to 5.71 % in study group was seen.

## DISCUSSION

In the present series most common findings were are profuse perspiration (97.14%), excessive salivation (91.42%), pain (91.42%), vomiting (77.14%), priapism (58.57%), tenderness at local site (57.14%), dyspnea (50%) and swelling at local site (12.85%). Maximum cases presented in sympathetic phase (42.8%) than

hypokinetic phase (27.14) and minimum cases presented in parasympathetic phase (21.42). Though clinical presentation may vary from place to place because of local factors involved in delay but in Rewa region very few patients (21.42%) presented in the initial phase because of belief in traditional treatment and delay in transportation. We need to emphasize on early reporting in the hospital so that patients do not go to hypokinetic phase in which morbidity and mortality is more. S. mahadevan et al reported bradycardia in 9 % cases so they might have come in parasympathetic phase. H. S. Bawaskar also found in his study of 54 cases that 7.84 % cases had bradycardia which might be in parasympathetic phase. B. R. santhakrishna from madras also reported that in 294 cases observed all patients had profuse sweating.

## CONCLUSION

Cases with history of Scorpion sting who reported to hospital were included in the study group. A total of 70 patients in 2 years were taken as study group and retrospective 50 patients in the earlier 2 years were taken as control group. Conclusion was (1) incidence of scorpion sting was maximum in pre school age group (50 %) in both study and control group. (2) Incidence of scorpion sting was maximum in males in both case (67.1%) and control group (62%). (3) Maximum cases were reported in summer (30%) and rainy season (32%). (4) most of the cases were stung during evening or night (57.14%). Statistically significant mortality was seen in those patients who had Hypotension (14.28 %) as compared to Hypertensive patients (2.50%). From statistical inference highly significant reduction in mortality from 34% in control group to 5.71 % in study group was seen.

## REFERENCES

1. Erfati P. Epidemiology, symptomatology and treatment of buthinae stings. In: Bettini S, editor. Arthropod Venoms: Hand Book of Experimental Pharmacology. New York: Spring Verlag; 1978. pp. 312-5.
2. Bawaskar HS, Bawaskar PH. Scorpion sting. J Assoc Physicians India. 1998; 46:388-92.
3. Bawaskar HS, Bawaskar PH. Indian red scorpion envenoming. Indian J Pediatr. 1998;65:383-91.
4. Wallace JF. Disorders caused by venoms, bites and stings. In: Isselbacher KJ, Adams RD, Braunwald E, Petersdorf RG, Wilson JD, editors. Harrison's Principles of Internal Medicine. 9th ed. Johannesburg, London, Tokyo, etc: McGraw-Hill International Book Co; 1980. pp. 924-5.
5. Mundle PM. Pulmonary edema following scorpion stings. Br Med J. 1961;1:1042.
6. Yang HP, Chen FC, Chen CC, Shen TY, Wu SP, Tseng YZ. Manifestations mimicking acute myocardial infarction after honeybee sting. Acta Cardiol Sin. 2009;25:31-5.
7. Rahav G, Weiss AT. Scorpion sting-induced pulmonary edema. Scintigraphic evidence of cardiac dysfunction. Chest. 1990;97:1478-80.
8. Bawaskar HS, Bawaskar PH. Management of scorpion sting. Heart. 1999;82:253-4.
9. Bahloul M, Kallel H, Rekkik N, Ben Hamida C, Chelly H, Bouaziz M. Cardiovascular dysfunction following severe scorpion envenomation. Mechanisms and pathophysiology. Presse Med. 2005;34:115-20.
10. Valdivia HH, Kirby MS, Lederer WJ, Coronado R. Scorpion toxins targeted against the sarcoplasmic reticulum Ca (2+)-release channel of skeletal and cardiac muscle. Proc Natl Acad Sci U S A. 1992;89:12185-9.