UNUSUAL PRESENTATION OF BEE STING

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ABSTRACT: Bee sting in the most of the situations potentially serious. The spectrum of bee sting disease ranges from mild reaction to acute tubular necrosis and some-times death. Here we are reporting a rare case of right facial palsy developed 6 hours after bee sting. Other manifestations are polyneuritis, encephalitis and pulmonary edema.

KEYWORDS: Bee sting, facial palsy.

INTRODUCTION: The severity of the bee sting reaction can vary from one person to other. Bee sting reaction en countered in only 5% to 7% of bee sting patients. The manifestations are local and systemic, systemic manifestations are rare and include polyneuritis, encephalitis and pulmonary edema, bleeding manifestations, ATN. Here we are discussing a case of right facial palsy developed after bee sting.

CASE REPORT: A 55 years male patient presented to the emergency department with deviation of face to left side. The history revealed he got multiple bee stings while he was attending a local festival in his village. Following the bee sting he attended local hospital where he has received Injection Tetanus Toxoid, antihistaminic and analgesics. He came to home town while he was eating he noticed drooling from right side and noticed deviation of mouth to left side. He is not a known diabetic, hypertensive and no other medical diseases. He also noticed headache and right side ear pain and right side swelling all around the ear. However there was no history of fall, head injury, diplopia and weakness of any limb. Detailed evaluation of the patient revealed no other positive history and clinical finding except right facial palsy. Examination of the patient showed a pulse rate of 110/ min, blood pressure of 120/70 mm Hg, Spo2 98%, Respiratory rate 20/min regular and patient was afebrile. Nervous system examination showed right LML type of facial palsy, power, tone, reflexes are normal local examination revealed redness, edema around right ear and right cheek. ENT examination revealed edema in the external ear and some sting marks in the external ear.

Investigations revealed hemoglobin, 13gm% Total leukocyte count 14000/ mm3 Differential count of N 85, L 10, E5,M0 and platelet count of 2,80,000/ mm3. Serum chemistry showed sugar 110mg/dl, urea 20 mg/dl, creatinine 0.8 mg/dl, bilirubin of 1.0 mg/dl, SGOT 28IU/L, SGPT 24IU/L, Alp 100 IU/L, Sodium 140 meq/dl, potassium 4.2 meq/dl. Arterial blood gas analysis was within normal range. CT scan brain was taken which was normal. ECG is normal. The patient was treated with prednisalone 60mg/ day for 3 weeks in a tapering doses along with antibiotics, antihistamines, physiotherapy and eye care. He was discharged after 48 hours and followed in OPD he recovered totally in four weeks.

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DISCUSSION: The exact pathogenesis of development of Neurological symptoms following bee sting is not known, but it is postulated that the venom contains biogenic amines, polypeptides or protein. The toxins in the venom induces an a IgE antibody production these antibodies can cross react with myelin basic protein and causes various Neurological symptoms.¹ Therefore the bee venom is being used since many centuries in the treatment of various diseases² Though widely studied in western and African countries regarding various allergic reactions of bee sting, the literature from India is sparse and most of the cases were single case reports.³ The review regarding various neurological manifestations revealed that several syndromes, presumed to be immune-mediated, are associated with late complications of Hymenoptera envenomation, including Guillain-Barre syndrome, multiple sclerosis, optic neuritis, Parkinsonism, and transverse myelitis.⁴ The possible mechanisms of the CNS involvement include, immunologically mediated damage resulting to GB syndrome and various other forms of encephalomyelitis, or the direct affection of the apamin receptors by the venom.⁵ In the present case the involvement of facial nerve is due to local reaction with a edema in the facial canal which was resolved after treating with steroids and antihistamine.⁶ Finally, very rare medical disorders such as encephalitis, polyneuritis and renal failure have followed insect stings.⁷

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