

Rat bite orbital cellulitis

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Apart from transmitting various specific diseases (Manson-Bahr, 1960), rat bite is known to cause an inflammatory local reaction which may rarely go on to the stage of cellulitis. A case is reported below in which the bite of a house-rat near the inner end of the left eyebrow caused orbital cellulitis and proptosis.

Case report

A Hindu female aged 25 years was seen at the Eye Out-Patient Department of Irwin Hospital, New Delhi, on February 2, 1969, with the complaint of pain and protrusion of the left eye following a rat bite over the left eyebrow about one week earlier. This was associated with fever and other constitutional disturbances. The body temperature was 102°F., blood pressure 120/80, pulse rate 120/min. The left preauricular node was palpable and tender.

Examination There was a small indurated swelling on the inner end of the eyebrow which was quite tender to the touch. The left eye was proptosed. Both lids were oedematous with moderate conjunctival chemosis. Ocular movements were markedly restricted in all directions. The visual acuity in the left eye was counting fingers at 1 m. with accurate projection of light. Fundus examination showed slight hyperaemia of the disc with dilation and tortuosity of the veins. Exophthalmometry (Hertel's method) showed the right eye 14 mm. and the left eye 27 mm.

Laboratory Investigations Hb 8 g. per cent. Total leucocyte count 11,000 per cu. mm. (polymorphonuclears 48 per cent., lymphocytes 51 per cent., eosinophils 1 per cent.). Erythrocyte sedimentation rate 93 mm./1st hour (Westergren).

Blood cultures, serological tests for syphilis, and urine examination were negative. Skiagrams of the paranasal sinuses, orbits, and optic foramina showed no abnormality.

Treatment The patient responded well to intravenous achromycin 250 mg. 6 hrly. The temperature returned to normal within 2 days, and the proptosis began to regress and disappeared completely in 7 days.

Result The patient was then discharged and has remained symptom-free.

Comment

Rat bite is not uncommon in Indian villages but the victims rarely need hospital care, and the eyebrow is a very uncommon site. It is rare for the organisms in the buccal cavity of a house rat to be so virulent as to cause such severe cellulitis.

Summary

Orbital cellulitis caused by a rat bite at the inner end of the left eyebrow responded very well to intravenous injections of a broad-spectrum antibiotic.

Reference

MANSON-BAHR, P. H. (1960) "Manson's Tropical Diseases", 15th ed. Cassell, London