

Penetrating orbitocranial injury with a snooker cue

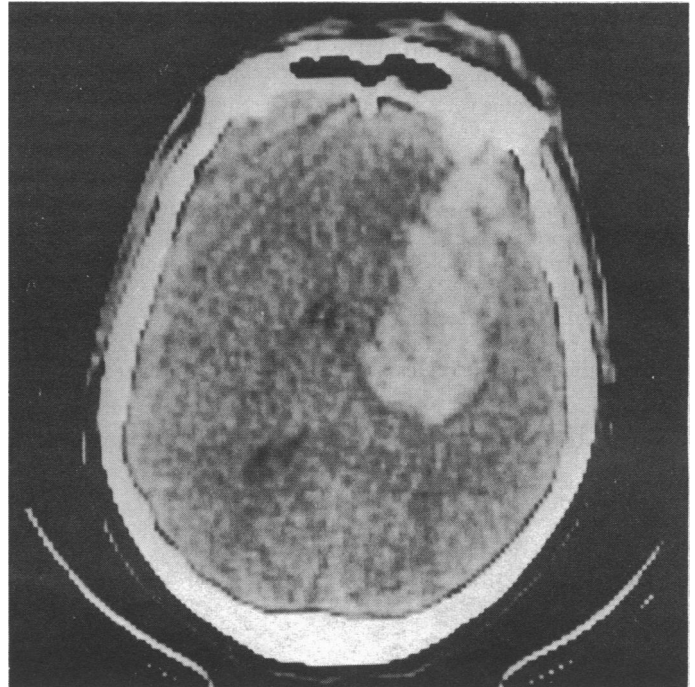
A young man playing snooker was awaiting his turn, holding the cue with the butt resting on the floor, when he was playfully punched in the stomach by an opposing team member. He doubled up and the tip of the cue penetrated his upper eyelid. He withdrew the cue and attended the casualty department unaided. Apart from hyphaema the eye was unscathed. Four hours later he became unconscious and computed tomography showed a massive intracranial injury (figure). A large right intracerebral haematoma extended from the ganglionic region to the frontal lobe inferiorly and there was extracranial soft tissue swelling over the right frontal bone.

Penetrating orbital wounds frequently extend intracranially.¹⁻⁸ The diagnosis is missed because the entry wound is small,³ vascular and infective complications are often delayed,^{1,2,4,7} and conventional radiography is unreliable.² A CT scan is essential.⁹

Before neurosurgical intervention cerebral angiography is advisable to exclude vascular damage.¹⁰ Postoperatively this patient recovered with a residual hemiparesis. Clearly, an intracranial component must be suspected in any penetrating orbital wound.—G R KIRKBY, Birmingham and Midland Eye Hospital, Birmingham B3 2NS.

I thank Mr D Price and Mr B Harcourt for advice and criticism, Dr M Nelson for reporting on the CT scan, and Miss A Gelder for typing the manuscript.

- Duffy GP, Bhandari YS. Intracranial complications following transorbital penetrating injuries. *Br J Surg* 1969;56:685-8.
- Bard LA, Jarrett WH. Intracranial complications of penetrating orbital injuries. *Arch Ophthalmol* 1964;71:332-43.
- Guthkelch AN. Apparently trivial wounds of the eyelids with intracranial damage. *Br Med J* 1960;iii:842-4.
- Hamilton JG. Orbital injury and carotico-cavernous fistulae. *J Neurol Neurosurg Psychiatry* 1966;29:476.
- Duke-Elder S. Wounds of the adnexa: penetrating wounds of the orbit. In: Duke-Elder S, ed. *System of ophthalmology*. Vol 14. Pt I. London: Kimpton, 1972:437-48.
- Dabiezies OH, Naugle TC Sr, Naugle TC Jr. Penetrating orbital injury caused by an "Afo comb." *Ann Ophthalmol* 1982;14:780-2.



- Amano K, Shuji K. Cerebellar abscess due to penetrating orbital wound. *J Comput Assist Tomogr* 1982;6:1163-6.
- Carothers A. Orbitofacial wounds and cerebral artery injuries caused by umbrella tips. *JAMA* 1978;239:1151-2.
- Lunsford LD, Woodford J, Drayer BP. Cranial computed tomographic demonstration of intracranial penetration by an orbital foreign body. *Neurosurgery* 1977;1:57-9.
- De Villiers JC. Stab wounds of brain and skull. In: Vinken OJ, Bruyn JW, eds. *Handbook of clinical neurology*. Vol 1. Amsterdam: North-Holland Publishing Co, 1975:477-503.

Outbreak of Weil's disease in a food fad commune in India

Weil's disease is rare in India. Though the society is predominantly vegetarian, there is a small community that is unique in its habit of catching, cooking, and eating rats, mice, and snakes. Found in eastern India, this poor and gypsy like wandering community is known as mussher, a name derived from "Muss," which means "mouse" in the local language. Such communes bear the social stigma of being untouchable, and they make their temporary settlements on the outskirts of villages.

We report an outbreak of seven cases of Weil's disease in a commune of 40 people after a feast of rat meat.

Case report

In late September (after the rainy season in India) a 17 year old woman was admitted after complaining for seven days of high colour urine and pain over her right hypochondrium. She had been feverish for three days with a fluctuating temperature of up to 42.2°C. She had appreciable anorexia and nausea and had vomited occasionally. Ten days earlier she had eaten rat meat (*Rattus rattus*) that she had been offered by a wandering commune that had settled beside her house.

On clinical examination she was found to have a high temperature, severe icterus, suffused conjunctivas, hepatosplenomegaly, and a stiff neck. The results of investigations showed: white cell count $30.4 \times 10^9/l$ with 90% polymorphs, bilirubin 135 $\mu\text{mol/l}$ (7.9 mg/100 ml), alanine aminotransferase 400 IU/l, alkaline phosphatase 21.0 KAU/l, creatinine 106 $\mu\text{mol/l}$ (1.2 mg/100 ml), sodium 140 mmol (mEq)/l, and potassium 4.2 mmol (mEq)/l. The results of routine urine examination showed albuminuria and the presence of bile salts and bile pigments. Cerebrospinal fluid contained protein 0.5 g/l, glucose 2.4 mmol/l (44 mg/100 ml), and white cells $25 \times 10^6/l$ with 80% lymphocytes. No malaria parasites or Leishman-Donovan bodies were found in thick or thin blood smears. Urine culture showed no growth. Results of Venereal Disease Research Laboratory and

Wassermann reaction blood tests were negative. *Leptospira* was present in urine cultured on a special medium containing fluorouracil.

She responded well to treatment with penicillin and general care and was discharged after three weeks completely recovered.

Epidemiological study

Epidemiological setting—After the index patient had presented we located the commune and made inquiries. The outbreak had occurred in a small village near Patna on the bank of the Ganges. After harvest the beds of the paddy fields were dry and heavily infested with rats.

Epidemiological survey—The commune comprised 40 people, all of whom were descendants of a common grandparent. None had suffered from jaundice in the past. Seven members aged 4 to 36 were suffering from an acute febrile illness associated with jaundice and conjunctival suffusion (table). Of these seven patients, three children did not participate in the catching or cooking of the rats. The patients were erroneously presumed to be suffering from viral hepatitis; all

Clinical features of cases of Weil's disease in commune

Case No	Age (years)	Sex	Incubation period (days)	Main clinical features				Leptospira in urine shown by culture
				Temperature range (°C)	Bilirubin concentration ($\mu\text{mol/l}$)	Albumin present in urine	Stiffness in neck	
1	16	M	10	38.9-40.0	68.4	+++	Yes	Yes
2	36	M	10	38.3-40.0	119.7	+	No	No
3	12	F	12	38.3-39.4	66.7	++	No	Yes
4	4	M	12	36.7-38.9	73.5	Trace	Yes	No
5	25	F	16	37.2-39.4	59.9	++	No	Yes
6	29	M	17	37.2-40.6	49.6	+	Yes	No
7	9	M	18	37.8-40.0	32.5	+++	No	Yes

Conversion: SI to traditional units—Bilirubin: 1 $\mu\text{mol/l}$ = 0.06 mg/100 ml.