UNUSUAL INTRA-ORBITAL FOREIGN BODY*

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INTRA-ORBITAL foreign bodies are not commonly encountered in civilian practice. The dangers inherent in wounds near the orbital roof have recently been emphasized (Guthkelch, 1960). For these reasons, a single unusual case is worthy of mention.

Case Report

An Indian lad aged 14 years, who had been hit in the right eye by a dart from an air pistol, was first seen 24 hours later. A trivial puncture wound was evident just above and medial to the inner canthus of the right eye. The visual acuity was 6/18 and there was slightest oedema of the upper lid. X-ray showed a somewhat alarming picture (Figs 1 and 2). The large dart appeared to be lodged very close to the optic foramen and it was thought that its point might have penetrated the posterior part of the orbital roof.

FIG. 1.—Lateral radiograph, showing foreign body in right orbit.

FIG. 2.—Antero-posterior radiograph, showing foreign body in right orbit.

The patient was admitted to hospital, penicillin and streptomycin were administered, and he was prepared for exploratory craniotomy. Immediately before the operation consideration was given to the indicated direction of the missile and to the fact that it would have struck the orbital roof close to the orbital foramen where the bone is comparatively thick and dense. It was then decided that an extra-cranial approach *via* the orbit should be attempted first.

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The entrance wound was probed; the instrument followed a tract to a depth of $1\frac{1}{2}$ inches and released foul-smelling pus. An incision was made along the medial half of the upper lid; the orbicularis muscle was incised in the line of its fibres and deep retractors were inserted. Oedema in the peri-orbital tissues aided dissection. It was then possible to feel the foreign body with fine-pointed dissecting forceps, with which it was grasped and removed with ease. The wound was sutured around a catheter drain which was left *in situ* for 72 hrs. Recovery was quite uneventful, and the visual acuity was 6/6 unaided. At the most recent follow-up examination no ptosis was present.

Discussion

This case again emphasized the necessity for careful assessment of penetrating wounds of the orbit, however trivial they may appear superficially. Radiography is obligatory. Consideration should be given to the possibility of penetration of the anterior cranial fossa, and to that end the nature, direction, and velocity of the penetrating object or missile should be assessed.

While all authors emphasize the thinness of the roof of the orbit (Gray, 1942), the examination of skulls will demonstrate that the roof becomes far thicker posteriorly, where the walls of the orbit converge towards the optic foramen.

Provided that there is reason to suppose that penetration of the anterior cranial fossa has not occurred, a transorbital approach affords good access to fairly large foreign bodies.

REFERENCES

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