OSTEOMA OF ORBIT*

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Case Report

A male labourer, aged 52, stated that for about 2 years he had noticed swelling about the "left eye" and some dimness of vision. At times the eye had been painful and he had noticed redness and watering. He had had no trouble with the right eye.

Examination (December 28, 1953)

Right Eye.—Visual acuity 6/6 part, media clear, fundus normal.

Left Eye.—Visual acuity 6/36; with +2.5 D sph. 6/9.

There was some oedema of the eyelids and mild to moderate proptosis. The eye was displaced directly forwards with marked resistance to reduction into the orbit. The external ocular movements were full. No tumour palpable, media clear, fundus showed slight swelling of disc with veins dilated and some rucking or crinkling of retina in macular area. Visual fields full.

X-Ray of Skull.—A large osteochondromatous mass had a broad base attachment to the left orbital root extending medially to the cribriform plate and posteriorly almost to the lesser sphenoidal wing. It was capped by two very large osteomatous masses, one of which half filled the left frontal sinus and the other the medial half of the left orbit. The mass extended downwards and medially into the left ethmoidal sinus. In the medial cartilaginous part small islands of osseous tissue were seen (Fig. 1, opposite).

Operation.—On January 17, 1954, I assisted my colleague Mr. Kennedy Hunter, the ear, nose, and throat surgeon. Both antra had been washed out previously; some muco-pus was present, but was found to be sterile.

An external incision was made down to the bone beginning just below the centre of the eyebrow and continued round the inner canthus to the infero-medial margin of orbit.

The orbital contents and periosteum were freed medially exposing the tumour, which was found to have invaded about half the frontal and ethmoidal cells, the remaining areas of the cells being filled with thick tenacious mucus. The lateral ethmoidal wall was partly eroded as was the floor of the frontal sinus, and one square inch of dura was exposed in the roof of the frontal sinus. The tumour, which was attached to the ethmoid by a pedicle about $\frac{1}{2}$ " in diameter, was easily removed. A rubber drainage tube was inserted through the nose into the medial part of the frontal sinus. Penicillin and sulphonamide powder were inserted into the wound which was then sutured.

Pathologist's Report.—The tumour is a dense sclerosing benign osteoma, weighing 29 gm., with a volume of 18 ml. (Fig. 2, opposite).

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Discussion

Ingalls (1953) reported only two cases of osteoma (0·9 per cent.), in an analysis of 216 case histories.

These slowly growing bony tumours are solitary growths and may attain large size and great hardness. They may arise anywhere in relation to the periosteum and probably originate during foetal life but are not discovered until

FIG. 1.—X ray of skull showing islands of osseous tissue and position of tumour.

FIG. 2.—Tumour after removal.

after childhood. When originating in the paranasal sinuses they are often attached to the wall of the sinus by a pedicle or broad base.

This case was discussed with an ear, nose, and throat surgeon and a neurosurgeon and, in view of the x-ray findings that the tumour was anterior, the orbital route was considered better than the transcranial.

The chief operative risk in the past was the infection of exposed meninges, but to-day, with sulphonamide and antibiotic cover, this risk is negligible.

After operation the unaided vision improved from 6/36 to 6/9, and the 2·5 D of hypermetropia had become 0·5 D. Presumably pressure on the globe had caused a shortening of the antero-posterior axis, with resulting hypermetropia.

It is remarkable how the orbital tissues and circulation can adapt themselves to a slowly growing space-occupying orbital tumour so that it can attain a relatively large size before proptosis or diplopia is evident.

REFERENCE

INGALLS, R. G. (1953). "Tumors of the Orbit and Allied Pseudo-tumors". Thomas, Springfield, Ill.