OSSIFICATION IN A CONJUNCTIVAL TUMOUR*

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FIBROMATA of the conjunctiva, though rare, are the commonest polypoid tumours of the conjunctiva. Usually soft, rapidly growing vascular growths, they may become oedematous (myxo-fibroma), undergo elastic degeneration (elastoma), or be neurofibromatous (Duke-Elder, 1938). Other epibulbar fibromata may represent congenital rests of mesodermal tissue which have developed into connective tissue rather than into various mesodermal derivatives. Sections at various levels in such tumours may show fat, cartilage, bone, smooth muscle, or myxomatous tissue (Reese, 1951).

Reese classifies bone formation found in ophthalmological practice under the following heads:

- (1) In a neoplasm.
- (2) In association with a teratoid or composite growth arising from a congenital rest.
- (3) In association with severe congenital anomalies.
- (4) As an isolated epibulbar nodule unaccompanied by any other abnormality of the eye.
- (5) In tissues which are the seat of past inflammation and degenerative changes.

The appearance of bone inside a fibroma must be an extremely rare event and therefore it is thought that the following case may be of interest.

Case History

A little girl aged 3 was said by her mother to have had a lump on the conjunctiva of the right eye at birth, which had been slowly increasing in size. She desired its removal for cosmetic reasons only.

The lump was the size of a pea on the bulbar conjunctiva on the upper and outer quadrant of the globe midway between the limbus and outer canthus. It was quite mobile, not vascularized, and extremely hard when grasped with the forceps. It was excised under general anaesthesia and sent to the South African Institute of Medical Research for routine examination. The following report was made:

Section of this specimen from the conjunctiva shows the presence of a rim of fibrous tissue surrounding an area of bone in which Haversian systems are seen.

These histological features suggest those of ossifying fibroma (Figs 1-3, overleaf).

To eliminate the possibility that this fibroma was a manifestation of von Recklinghausen's disease, the patient and her mother were examined, and the family† carefully interrogated. No evidence of neurofibromata or *café-au-lait* spots was found.

There was no evidence of any other ocular disease and the patient was fit and normally developed for her age.

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†The father, being divorced, was not available.

FIG. 1.—Section of specimen of tumour of conjunctiva showing rim of fibrous tissue surrounding an area of bone in which Haversian systems are seen. $\times 22$.

Discussion

A case of ossification occurring inside a conjunctival fibroma present since birth in a 3-year-old child is described. The diagnosis appears to fall into Group 4 of Reese's classifications, which he describes as follows:

"An isolated epibulbar nodule unaccompanied by any other abnormality of the eye, usually located in the upper, outer quadrant of the globe 5—10 mm. from the limbus, situated under the conjunctiva, embedded in connective tissue and attached to the scleral surface. The lesion is present at birth and is reputed even to increase in size. It is of fairly uniform size, varying from that of a pea to that of a bean."

Apart from the fact that this nodule was freely movable, the other criteria are fulfilled.

Summary

A case of ossification occurring inside a conjunctival nodule, present since birth, in a 3-year-old child is described and photomicrographs of the tumour are presented. It is uncertain whether the tumour is a fibroma or a dermoid.

FIG. 2.—High-power magnifications of similar sections. (a) $\times 30$. (b) $\times 120$.

I should like to thank the staff of the S. African Institute of Medical Research for the pathological report and the excellent photomicrographs, and Dr. A. H. Louw for referring the case and investigating the patient's family.

REFERENCES

- DUKE-ELDER, S. (1938). "Text-book of Ophthalmology", vol. 2, pp. 1752, 1789. Kimpton, London.
REESE, A. B. (1951). "Tumors of the Eye", Chapters 11, 12. Hoeber, New York.