LYMPHOSARCOMA OF EYELID

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ORBITAL tumours are considered rare; and sarcoma of the eyelid is a very rare growth. In an analysis, however, of 500 tumours among natives of Nigeria suffering from malignant disease, E. C. Smith and B. G. T. Elmes¹ found that 29, or 5·8 per cent., of the tumours examined occurred in children under ten years of age; and of these, no less than 10 were round-celled sarcomas of the orbit.

Smith and Elmes suggest that probably many of these growths had their origin in trauma, since injuries to the eye are notoriously common among the natives.

The next age group (10 to 30) included 57 tumours with the number of eye tumours diminished to 3, whereas tumours of the parotid increased to 13.

Under "Tumours of the Orbit," they state that the orbital growths comprised 18 sarcomas, 10 carcinomas, 1 endothelioma, and 1 cylindroma. With the exception of one melanotic growth, all the sarcomas were round-celled in type.

A photograph is shown of a patient as Fig. 5, a boy aged 12 years, with a round-cell sarcoma of six months' duration. It has the appearance of the tumour having started in the eyelid as in the case recorded below.

Friedenwald² illustrates a case of round-celled sarcoma of the eyelid with a photomicrograph. He finds that sarcoma of the conjunctiva is rare and exhibits no predilection for any special type.

Of 4,899 eye cases seen at the Colonial Hospital, San Fernando, from May 16, 1932, when the Eye Department was established, to the end of December, 1936, the following case is the only one of malignant disease of eyelid or orbit.

R.F., a Trinidad brown-skinned boy of impure African descent, was first seen as an out-patient on October 16, 1934. He was then 11 years of age.

The condition of his right upper eyelid then appeared to be that of a large neglected chalazion with granulation tissue protruding towards the lid margin. Arrangements were made for operative treatment, and it was then seen that, instead of a chalazion being present, a soft friable growth infiltrated the upper lid in its nasal

half well back towards the upper fornix, appearing on the conjunctival surface as a palish flat mass and bleeding readily.

The appearances were unusual and operation was postponed for admission to hospital. Unfortunately, the boy failed to return until December 11, 1934, when he reported at out-patients with the enormous lid enlargement shown in Fig. 1.

The globe of the right eye was then completely hidden. There were dilated veins on the oedematous skin surface and the whole

FIG. 1.

R.F., before operation. Photo taken December, 1934.

eyelid was greatly thickened, tense, and indurated. On December 14, 1934, his blood Wassermann reaction was reported to be strongly positive and it was then decided to give anti-syphilitic treatment for two weeks. There was no change as the result of intravenous N.A.B. together with Pot. Iodid. 21 grains a day. On the same day, December 14, portions of growth were removed for microscopic examination and were later on reported to be round-celled sarcoma by Dr. J. L. Pawan, M.B.E., Government Bacteriologist.

Under general anaesthesia the eyeball was seen to be free from involvement, but there was extension towards the subconjunctival tissue of the lower lid with invasion of the caruncle and plica.

Exenteration of the contents of the orbit was finally decided on with removal of both eyelids. The operation was performed on December 30, 1934. Healing took place without any complication; but skin grafting was delayed until February 22, 1935, by the development of an iodide rash with pustule formation.

FIG. 2.

R.F., after exenteration of right orbit and skin graft. Photo taken June 11, 1935. Frowning due to mydriatic effect, left eye.

At the skin-grafting operation an enlarged gland was excised from the angle of the right jaw, and was reported to contain sarcomatous tissue similar to that found in the excised upper lid.

The dark appearance of the skin graft at the apex of the orbit can be seen in Fig. 2, which was taken on June 11, 1935. After the exenteration operation, anti-syphilitic treatment was continued until his discharge on March 15, 1935, to the care of the D.M.O., Dr. Jesse Grell.

On June 21, the blood Wassermann reaction was reported to be still strongly positive. There are no stigmata of congenital syphilis in this boy.

On October 4, 1935, an enlarged lymph node, found on the right side of his neck in the posterior triangle, was excised; but microscopic examination of it showed no signs of malignancy.

The boy remains well and in good health, with no evidence of recurrence. He was last seen by me on December 4, 1936. He has had two courses of treatment with N.A.B. and Bismuth in view of the repeatedly strongly positive W.R.

With Dr. Pawan's approval, and the consent of Dr. Wise, Surgeon-General, the exenterated orbital contents were sent by me to Dr. W. F. Harvey, Royal College of Physicians Laboratory, Edinburgh. Dr. Harvey has kindly given me permission to publish his report. It is as follows, and is dated May 4, 1935 :

" Sections show : (1) What I consider to be, probably, a large round cell lymphosarcoma (reticulum cell sarcoma); (2) Very great

FIG. 3.

Photo of macroscopic section of whole transection of eyeball and lids, showing growth in lids.

cellularity; (3) Numerous mitoses; (4) No connection with the surface epithelium of either eyelid or conjunctiva; (5) Fairly large nucleus and eosinophilic cytoplasm; (6) No sign of any rosette or pseudorosette formation; (7) No indication of melanoblasts or melanophores, and (8) Restriction of growth to upper and lower lid. Complete freedom of the eyeball from tumour. I have considered the various probabilities here of epithelial tumour, neural tumour and especially the neurocytoma of the adrenal, melanoma, and glioma, and have come by a process of exclusion to the above diagnosis. But the tumour is a peculiar one. The presence of the same tumour in the lymph node at the angle of the jaw is somewhat confirmatory."

The macroscopic section shown in Fig. 3 is a whole transection of eyeball and lids prepared by Dr. Harvey. One half of the specimen was sent to the Royal College of Surgeons Museum, Edinburgh, and was gratefully accepted by the late Mr. David Greig, Curator of the Museum.

FIG. 4.

R.F., lymphosarcoma of eyelid. ($\times 100$)

FIG. 5.

R.F., lymphosarcoma of eyelid. ($\times 500$)

I am indebted to Dr. A. Rankine, Director of Medical Services, for permission to publish official records connected with this case.

REFERENCES

1. Smith, E. C. and Elmes, B. G. T.—Malignant disease in natives of Nigeria: an analysis of five hundred tumours. *Annals of Tropical Medicine and Parasitology*, Vol. XXVIII, 1934.
2. Friedenwald, J. S.—The pathology of the eye, p. 280, 1930.