CASES OF HAEMANGEIOMA OF THE PALPEBRAL CONJUNCTIVA FORMING PEDUNCULATED TUMOURS

BY
Rutson James, F.R.C.S.,
and
R. Salusbury Trevor, M.B.Cantab.,
Pathologist and Curator of the Museum, St. George's Hospital.

Conjunctival haemangeiomas are usually met with on the globe, but during the past six years we have seen two cases arising from that part of the membrane which covers the posterior surface of the upper lid. The clinical histories are as follows:

Case 1.—H. M., a youth, 17 years of age, came to the ophthalmic department at St. George's Hospital on December 17, 1910, complaining that he had failed to pass the visual test for the Royal Navy. His vision was found to be defective in the right eye and normal in the left. For practical instruction a student was asked to evert the upper lid, when there came into view a dark-red flattened tumour of about the size of a pea, which arose apparently from the conjunctiva at about the middle of the lid, on a level with the upper border of the tarsus. The tumour was pedunculated, the peduncle being quite short, was flattened from before backwards and freely movable. Under cocain anaesthesia it was removed by a single snip with a pair of scissors. Haemorrhage was trifling in amount.
The boy made an uninterrupted recovery, and a week later was perfectly well. The pathological report was: 'The tumour is a pigmented naevus. One of us (R. J.) showed the slide of this specimen at the Ophthalmological Society in 1911 (Trans. Ophthal. Soc., Vol. XXXI, p. 154). The late Mr. George Coats, who saw it, suggested that the pigment might possibly be blood pigment, derived from a previous haemorrhage into the growth, and recommended the staining of a second slide to see if Perls' iron reaction could be obtained. Unfortunately the block could not be found.'

Case II.—L. K., a girl, aged 13, came to the ophthalmic department at St. George's Hospital on June 15, 1917, complaining of a lump under the left upper lid, which she had noticed for about three months. The case came in labelled "ruptured tarsal cyst," but on evert ing the lid, it was obvious that the lump was a pedunculated tumour, with a short narrow stalk; and, bearing in mind the previous case, the diagnosis of naevus of the conjunctiva was put forward. The tumour was of about the same size as that in the former case, was flattened from before backwards and was connected with the conjunctiva of the outer part of the lid, about half-way between the lid margin and the fornix. It presented a piebald appearance, parts of it being yellow and the other parts red. It was snipped off under cocain anaesthesia, and there was practically no haemorrhage. Three days later the wound was healed.

The pathological report was: "The tumour is a simple naevus."

The term "naevus," used in the pathological reports on these two cases, has been applied to tumours of which the strictly correct description should be "Haemangeioma simplex." The term naevus is applied commonly to vascular tumours, without regard to their more intimate structure. It is generally agreed that a simple vascular naevus is a congenital malformation rather than a true neoplasm. The cases here described belong to the class of true blastomas, and consist of large endothelial cells arranged in many layers round spaces or tubules containing blood. In both cases the growths are slightly lobulated, the second case more so than the first. In both cases there is an irregular area of fibrous tissue round the periphery of the tumours, and in the second case this bears on the outside the patchy remains of a covering of several layers of flattened cells belonging to the palpebral conjunctival epithelium (see Figure). In the first case the epithelium has disappeared. The tumour from the first case has at some time become twisted on its pedicle, with the result that the tissue is partially necrotic and stains badly. The whole tumour is oedematous, and shows numerous interstitial haemorrhages, and at the same time is permeated with large cells crowded with brownish-yellow pigment. This pigment is probably the result of previous haemorrhages into the growth, but for the reasons given above this
statement could not be verified. The blood in some of the blood tubules has undergone thrombosis. The second case shows evidence of superficial ulceration, and at one such spot there is a thin covering layer of fibrin, which enmeshes numerous polymorphonuclear cells, and is undergoing organization.

The structure of both the tumours is typical of a haemangeioma simplex. Neither of them could be regarded as a vascular fibroma or a very vascular polypus, which, as Fuchs maintains, have often been described as pedunculated angiomas. Fuchs also states that primary angiomas are rare, and are generally found in the region of the inner angle of the eye, whereas in our cases one was at about the middle of the lid and the other nearer the outer angle.

Tumours arising from the fornix conjunctivae, or palpebral conjunctiva, mostly become flattened from before backwards, and pedunculated; the former obviously from the pressure exerted by the lids on the globe, which prevents the growth expanding to any great extent in a fore and aft direction, the latter possibly from the same cause, but probably from the constant movement which is taking place, both of the globe and of the lid.

The cocks-comb growth of conjunctival tubercle is the best known example; it is possibly to be accounted for in the same way.

We have been surprised during a somewhat extensive search of
the ophthalmological literature on the subject of naevus of the conjunctiva and lid tumours, to find so few references to similar cases; even Wintersteiner in his paper on Conjunctival Naevus in the Trans. Heidelberg Ophthal. Cong. 1898, does not mention the fact that these growths occasionally arise from the palpebral conjunctiva and become pedunculated as they increase in size. A large number of lid naevi have been recorded, but they are all of the cavernous aneigioma type, and involved the whole structure of the lid, for the most part showing through the skin surface as a bluish tumour.

References to pedunculated tumours of the conjunctiva in ophthalmic literature are few and far between; those that we have been able to find are as follows:

1. Talko in Klin. Monatsbl. f. Augenheilk., 1873, quoted by the late Sir Jonathan Hutchinson in the Royal London Ophthal. Hospital Reports, Vol. VIII, p. 249, describes the case of a pedunculated tumour of the conjunctiva in a boy of 12, which was first noticed after an injury. This boy suffered from home treatment, for his mother wrenched the tumour off and on its growing again shortly afterwards, she passed a pig’s bristle round the stalk and tied it. Finally Talko removed it. Histologically the tumour was composed of a stroma of connective tissue, enclosing small spindle-shaped cells. It was regarded as a small-celled fusiform sarcoma.

2. Elschnig in Arch. f. Augenheilk., 1889, Vol. XIX, p. 63, in an article entitled “Ueber die polypenanlichen Geschwiilste der Bindehaut,” describes a somewhat similar case of fibromatous tumour in a lad of 17, and he has collected some twelve other cases, mainly of the nature of fibromatous polyps; but two, those of Rampoldi and Stepanini, are specially described as angiomas, and occurred in middle-aged people of 50 and 53 respectively. Elschnig also devotes some space to a second group of hard fibrous tumours which were of the nature of sarcomata.

3. Erskine Henderson showed a similar case from Mr. Lang’s clinic at the Royal London Ophthalmic Hospital before the Ophthalmological Society in 1906 (Trans. Ophth. Soc., Vol. XXVI, p. 32). Histologically this was looked upon as an example probably of a leuko-sarcoma.

4. Hilbert, in the Centralbl. f. Pract. Augenheilk., May, 1908, p. 139, has a somewhat similar case in a man of 20. Symptoms of conjunctivitis were present in this case, but no account of the histology of the tumour is given, though it was removed surgically.