PAPILLARY CYSTADENOMA OF LACRIMAL CARUNCLE*

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TUMOURS of the lacrimal caruncle are uncommon. Evans (1940) collected 200 examples from the replies received to questionnaires sent to 1,700 physicians, but many of the case reports so obtained were poorly documented and several of the "tumours" were doubtfully neoplastic. Most of the growths were classified as benign and malignant melanoma and simple papilloma; only 1.5 per cent were reported as adenoma. In an analysis of 100 caruncular tumours, Duke-Elder (1952) noted a similar distribution, and an incidence of adenoma of 2 per cent.

A papillary cystadenoma of the caruncle, with features almost identical to those found in the case we describe below, was reported by Mackenzie and Patience (1959), and the oncolytic cyst of the caruncle reported by Radnót (1947) is clearly of a similar nature.

Case Report

A woman aged 82 years complained of a painless lump at the inner side of the right eye. It had been present for some months, slowly increasing in size.

Examination.—A cystic mass in the position of the caruncle extended downwards under the conjunctiva towards the lower fornix. It was moderately tense, mobile, and not tender. It was excised without difficulty and there has been no tendency to recurrence after 5 months.

Histology.—The operation specimen consisted of a rounded tumour (7 mm. in diameter) of cysto-papillary structure lying subjacent to the mucosa of the caruncle. The fluid in the cyst was somewhat opalescent.

Histologically the tumour was a multiradicular intracystic adenoma composed of papillary epithelial processes (Fig. 1, overleaf). The epithelial cells at the verge of the processes were columnar with round darkly-staining nuclei situated towards the free border: the more centrally-placed cells were cuboidal in shape. The cytoplasm was strongly acidophilic and distinctly granular. Mucin was present in many of the tumour cells and also in the cavity of the cyst. The tumour lay in loose connective tissue beneath the surface epithelium which consisted of a three- to five-cell layer of columnar, cuboidal, and basal cells, interspersed with mucus-secreting goblet cells. The continuity of this conjunctiva-like mucosa was interrupted by one or two rudimentary hair follicles. The glands seen in the substantia propria were those normally found in the caruncle, namely, small sebaceous glands and accessory lacrimal glands. Lying alongside the lacrimal glands were two dilated secretory ducts lined with cells of similar appearance to those composing

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FIG. 1.—Photomicrograph of the tumour. $\times 160$.

the tumour (Fig. 2). Serial sections revealed a definite relationship between these three structures, and the whole picture suggested that the tumour had arisen from lacrimal duct epithelium and was causing obstruction of the lumen with subsequent cyst formation.

FIG. 2.—Photomicrograph showing part of tumour (lower left corner), accessory lacrimal glands with dilated ducts, and mucosa of caruncle (upper right corner). $\times 70$.

There was a good deal of lymphoid tissue in the submucosa but none in the tumour itself.

Comment

Tumours of the lacrimal glands bear a distinct resemblance to those found in the salivary glands (Reese, 1956). Mackenzie and Patience (1959) considered that the caruncular tumour which they studied was derived from miniature lacrimal glands in the area and that it was analogous to an adenolymphoma of the parotid gland. There is certainly a striking structural and cytological similarity between these two types of tumour, especially when lymphoid tissue in the latter is minimal or absent. We believe, however, that the resemblance is largely fortuitous and can be attributed to the pattern of growth which may occur when neoplastic changes develop in the duct epithelium of secretory glands, irrespective of their site and function. Thus an almost identical histological picture may be seen in hidradenoma of the vulva, ceruminous gland adenoma of the external auditory canal, and a few cysto-papillary tumours of the breast.

Summary

The clinical and pathological findings in a case of papillary cystadenoma of the lacrimal caruncle have been described. It is believed that the tumour arose from accessory lacrimal glands in the submucosa of the caruncle.

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