

## PARALIMBAL AMYLOID TUMOUR\*†

BY

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THE following is an extremely rare case of amyloidosis of the bulbar conjunctiva from the adjacent area of the limbus.

A 60-year-old Muslim female was admitted to hospital on January 1, 1965, with the complaint of a gradually increasing mass over the cornea of the left eye for the last 8 years. There was no history of venereal disease, chronic septic foci, or tuberculosis.

*Examination.*—Her general health was normal; the liver and spleen were not enlarged.

The lids of the left eye were normal. A growth covered the whole cornea, arising from a site near the temporal limbus, and extending medially up to the caruncle. The nasal end was free and the temporal end had an arc-like attachment from 2 to 5 o'clock round the limbus. It was smooth, pink in colour, non-tender, and soft in consistency. Only one-quarter of the upper portion of the cornea was left clear (Fig. 1). The right eye was normal.

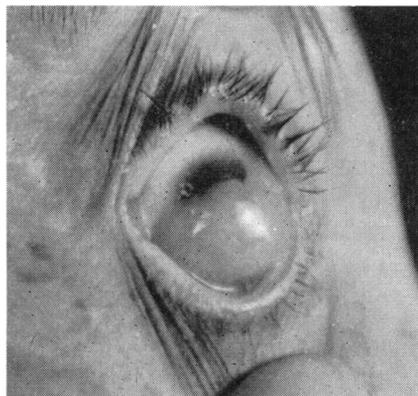


FIG. 1.—Clear portion of cornea exposed by raising the left eyelid.

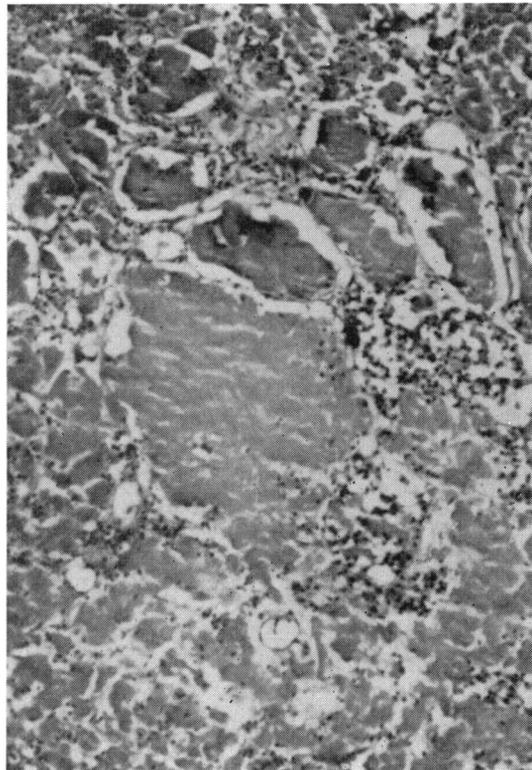


FIG. 2.—Section of excised tumour, showing large masses of amyloid substance, some surrounded by foreign body giant cells. In between are seen focal collections of round (plasma) cells. Haematoxylin and eosin.  $\times 80$ .

*Laboratory Investigations.*—Total white blood count—5,500 per cu. mm., polymorphs—68 per cent., lymphocytes—28 per cent., eosinophils—3 per cent., monocytes—1 per cent. Erythrocyte sedimentation rate—20 mm./first hr. Haemoglobin—10.8 per cent. Wassermann reaction and Kahn test negative. Urine normal. X rays of chest and long bones normal.

\* Received for publication July 5, 1965.

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*Biopsy.*—Histological section showed homogeneous hyaline deposits under the thinned-out conjunctiva. Selective staining with methyl violet gave the typical reaction of amyloidosis. The blood vessels were prominent with amyloid deposit in the vessel walls, which showed marked infiltration by chronic inflammatory cells, consisting mostly of plasma cells (Fig. 2).

*Operation.*—The growth was widely excised from its attachment by one of us (K.K.B.), care being taken not to injure the cornea. There was little bleeding.

*Result.*—When the conjunctival stitches were removed on the fifth day, the cornea was found to be uniformly hazy. The visual acuity was 6/36. The eye became completely quiet 10 days later (Fig. 3). There was no recurrence after 5 months.

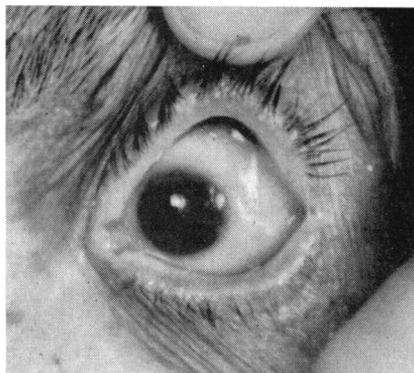


FIG. 3.—Appearance after removal of stitches.

### Discussion

The aetiology of amyloidosis is not clear. Guerry and Wiesinger (1960) suggested chronic trachoma and nutritional deficiency as possible causes. The primary affection occurs in the absence of any preceding disease and involves mesodermal tissue in the smooth and skeletal muscles, cardiovascular system, and skin. Secondary amyloidosis, affecting the spleen, liver, kidneys etc., develops in association with chronic infective lesions like tuberculosis, leprosy, ulcerative colitis, regional enteritis, bronchiectasis, pyelonephritis, tertiary syphilis, empyema, and osteomyelitis, and in ocular diseases such as trachoma and chronic conjunctivitis. The two forms often overlap (Koletsky and Stecher, 1939; King, 1948; Agarwal and Shrivastav, 1958).

A localized form, which may be called "amyloid tumour", may occur as a primary process in the larynx, tongue, thyroid, conjunctiva, etc. Conjunctival lesions are usually associated with chronic conjunctivitis or trachoma.

Amyloidosis is rare in India, and the localized ocular form is still rarer and usually affects the eyelids so that this case is perhaps unique. The corneal haziness was probably due to friction. No other organ of the body was affected, and the term "amyloid tumour" has been used because there was no recognized predisposing cause (Symmers, 1956).

### Summary

A rare case of localized primary ocular amyloidosis in a 60-year-old female is reported. A voluminous amyloid tumour arose from the bulbar conjunctiva near the temporal limbus and covered almost the whole of the cornea. There was no co-existent disease, systemic or local.

We wish to express our thanks to Dr. U. C. Chaturvedi, M.D., for his help in the histological study, and to Mr. M. P. Singh, M.Sc., for the photomicrography.

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