PIGMENTED LESIONS OF THE CONJUNCTIVA—II

WIDESPREAD FLAT LESIONS

Racial Pigmentation (Fig. 5)

Melanin pigmentation of the conjunctiva may be present in dark-skinned races. The pigmentation usually develops during the first few years of life and becomes static in early adult life. Areas of pigmentation are scattered throughout the conjunctiva, but they are most marked at the limbus and around the perforating branches of anterior ciliary arteries as they enter the sclera. With the slit-lamp the pigment is seen to be within the epithelium.

FIG. 5.—Racial pigmentation.

Subepithelial Melanosis (Fig. 6)

This can occur as an isolated congenital anomaly, in melanosis bulbi, or as part of the syndrome of oculo-dermal melanosis (naevus of Ota). With the slit-lamp the pigment is seen beneath the epithelium and because of this the lesion is usually blue-black in colour. Subepithelial melanosis may be present at birth or may appear in childhood. It is not usually progressive in adult life.

FIG. 6.—Subepithelial melanosis.

Widespread Intra-epithelial Melanoma (Fig. 7)

This is an acquired lesion of middle or old age, although occasionally it may occur in young adults. One or more areas of pigmentation may be present in the conjunctiva and they may extend on to the eyelids. The pigment is within the epithelium. The lesion may be stationary, progressive, or may even regress, but most commonly it is slowly progressive, ultimately leading to the formation of one or more malignant melanomata.

FIG. 7.—Widespread intra-epithelial melanoma.

Pathology

Racial Pigmentation (Fig. 8)

The histological appearance is of a diffuse epithelial melanosis, the melanin being produced by a normal number of melanocytes in the basal layer of the epithelium. When pigmentation is marked, melanin granules are seen scattered throughout the epithelium and are not restricted to its basal layer.

FIG. 8.—Racial pigmentation. Haematoxylin and eosin. $\times 167$.

Subepithelial Melanosis (Fig. 9)

Characteristic spindle-shaped melanocytes filled with uniform melanin granules are scattered throughout the subepithelial tissue, but there is no disruption of the architecture of the tissue and no tumour formation. In some cases the histological appearance of subepithelial melanosis merges imperceptibly into that of a blue naevus, a benign tumour arising from subepithelial melanocytes.

FIG. 9.—Subepithelial melanosis. Haematoxylin and eosin. $\times 42$.

Widespread Intra-epithelial Melanoma (Fig. 10)

The histological appearance is identical to that of localized intra-epithelial melanoma but the process is more extensive. There is a diffuse disturbance of the basal layer of the epithelium with pleomorphic tumour cells scattered throughout the epithelium.

FIG. 10.—Widespread intra-epithelial melanoma. Haematoxylin and eosin. $\times 167$.

(To be concluded)

Illustrations:

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