A. The Development of the Primary Vitreous. B. Hyperplasia of Persistent Primary Vitreous

W.A.		Manschot
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Rotterdam

(Will be published in detail in the Archives of Ophthalmology [Chicago].)

Discussion.

von Winning asked: Is the presence of the ectodermal tissue in the posterior pole in these cases related with the mesodermal origin of the retrolental tissue?

Manschot replied: The preretinal tissue in the posterior pole originates from the ectodermal neuroglial cells (Müllerian cells) of the retina. The retrolental mesodermal tissue, which penetrates into the ciliary region, originates from the mesoderm, which grows into the lumen of the optic cup during the early developmental stages. Their protoplasmic processes are connected with the protoplasmic processes of the cells of the ciliary epithelium.

Cooper asked: Has the connection between the retina and primary vitreous everywhere the same structure, or is there any difference between the posterior pole and the anterior margin of the optic cup?

Manschot replied: The pars optica retinae and the primary vitreous are separated by the internal limiting membrane, which is formed by Müllerian cells. The pars ciliaris retinae, which develops after the 45 mm. stage, consists of a double layer of epithelial cells; it has no Müllerian cells and, consequently, no internal limiting membrane.

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Waardenburg remarked: You several times referred to small eyes. Did you mean microphthalmic eyes or normal-sized infantile eyes? You mentioned Zeeman's case. In my opinion, eyes with ectopia pupillae et lentis are large eyes with axial myopia, rather than small eyes, and this anomaly probably has a different primary genesis which is also suggested by the fact that Zeeman did not describe retrolental tissue.

Manschot replied: Nearly all eyes with persistent hyperplastic primary vitreous are microphthalmic. The eye described by Zeeman showed buphthalmos, due to glaucoma which probably was secondary to the presence of persistent hyperplastic primary vitreous. The primary genesis, therefore, may have been the same.

Planten, J. Th.: Ophthalmologica 135: 128–135 (1958)

Degenerated Pigmentation Spots in the Iris.

By J. TH. PLANTEN (Leeuwarden).

In these last few years, attention has been drawn to the—probably—nervous genesis of the pigmented tumours, e.g. in the uvea. This theory is mainly based on embryological research, which also shows that the so-called chromatophores originate from the neural crest:

“melanoblasts”. It has long been known that the “Klumpenzellen” originate from the retinal pigmentary layer of the iris, let alone the neurogenesis of the iridal muscles.

An interpretation of the histological findings in a given tumour is difficult: both the definition of the mother tissue of the tumour and the determination of the tumour structure require much experience and “sympathetic” understanding.

However

all these studies

interesting though they are

do not elucidate the clinical pictures

of which there are a great variety

as there are also of the genesis of these tumours in a stricter sense. Although in general the pigmented iris tumour is rarely malignant

in the cases to be discussed there is the problem whether an abiding attitude

extirpation of the tumour or enucleation of the eye is indicated.

With reference to these considerations

the following three patients are discussed.