

CASE NOTES

INJURY SIMULATING CONGENITAL ANOMALY*

BY

L. STANTON-COOK

Sydney, Australia

It is remarkable that in some inflammatory conditions (particularly chronic anterior uveitis) the end results may come to resemble closely certain congenital abnormalities. For example, the arrangement of new vessels in the inflammatory membrane covering the front of the lens in chronic iritis often mimics that seen in the normal pupillary membrane. The new vessels may show a sectorial arcaded arrangement and may even in some cases arise from the lesser circle.

The present case is published to demonstrate how the effects of injury to the optic nerve may come to resemble persistence of the hyaloid artery and its glial cone. Without the definite history of trauma this case would undoubtedly have been considered developmental.

Case History

The patient, a boy of 9½ years, was injured in 1929 by another boy up a tree thrusting a bamboo pole into his right eye. He was seen the same day by Mr. Temple Smith of Sydney who found a haemorrhage in the vitreous, and diagnosed a rupture of the optic nerve or a haemorrhage into its sheath. He later observed the haemorrhage organizing. No perception of light was present.

I saw the patient in 1936 when he was 15½. The right eye was blind. The left eye normal with visual acuity 6/5. There was no external evidence of injury. The right pupil was inactive to direct stimulation but reacted consensually, and (sluggishly) to accommodation and convergence. The pupil dilated under H. and C. but not quite as well as the left.

The examination of the right fundus shows a cone of "proliferation" with base formed by the whole of the disc stretching forward into the vitreous; it looks like an aerodrome wind-sock but glistens white like a stalactite. At the apex of the cone, fine straight fibrils extend into the vitreous and are lost. Pigment partially surrounds the base of the cone.

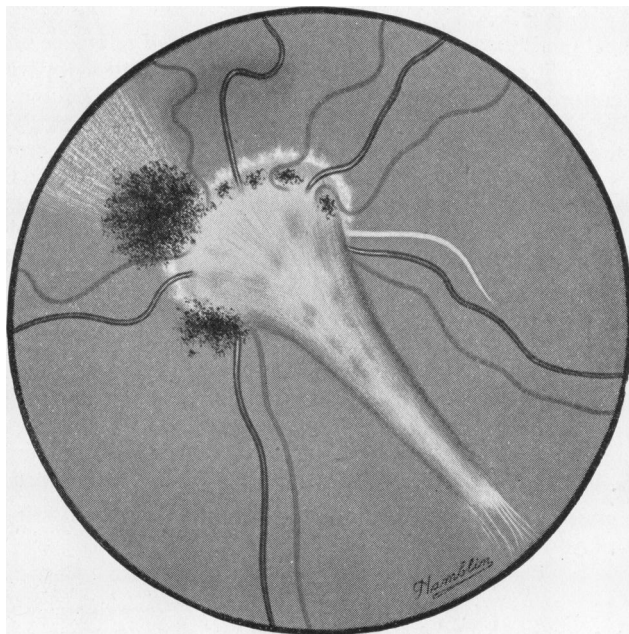
The general appearance is as depicted in the Figure† but it is impossible to convey the glistening whiteness with a superimposed greenish sheen, and the somewhat crenated surface, all of which combined to give the stalactite effect. The pencilling in the right upper quadrant is intended to indicate what appeared to be a slight, flat, local, retinal separation.

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† The Figure was prepared by Theodore Hamblin Ltd. under direction from an amateur painting made at my rooms.

It is obvious that without the history of injury and the immediate examination by Mr. Temple Smith the most likely diagnosis would have been persistence of the hyaloid artery and proliferation of its glial cone.

This case illustrates the fact that serious injury to the eye can occur without external evidence of trauma. The importance of obtaining a detailed history, even involving obstetric details, in any case suggestive of congenital anomaly but possibly attributable to trauma cannot be overlooked. It is possible that cases of retinal septum, macular coloboma, "congenital" detached retina, and glial proliferations on or near the disc may in some cases be post-natal in origin, though most are undoubtedly developmental.



FIGURE

Summary

A case is described of traumatic rupture of the optic nerve presenting the appearance of congenital persistent hyaloid artery and glial cone.

My thanks are due to Mr. Temple Smith, who examined the boy on the day of his injury, for his notes; and to Professor Ida Mann for the benefit of her vast experience and suggestions.