BILATERAL COLOBOMA OF THE OPTIC DISC

Summary

Almost without exception patients with xanthelasmata suffer from various kinds of allergic diseases, and if they do not, at any rate we find allergic disorders in their relations. As these benign tumours are probably closely related to the cholesterol metabolism and the latter stands under the regulating influence of the autonomic nervous system and as finally allergic disorders have much to do with the sympathetic and the para-sympathetic nerves, an attempt is made to consider all these apparently heterogeneous diseases from one viewpoint, i.e., a dysfunction of the vegetative nervous system.

REFERENCES


A CASE OF BILATERAL COLOBOMA OF THE OPTIC DISC*

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Report of a Case

The patient, Patrick N., aged 24 years, presented with the complaint that his right eye had turned outwards since an injury when he was only a few months old. It had not troubled him until he contemplated marriage and he came to ask for a cosmetic operation. (The patient was demonstrated at the May, 1947, meeting of the Section of Ophthalmology, Royal Society of Medicine).

Family history and past medical history: essentially irrelevant.


Under H. and C.

\[ \begin{align*}
-5.0 & \quad +1.25 \\
-4.5 & \quad +1.25 \\
\text{Not improved} & \quad +0.5 \\
\text{lenses.} & \quad +0.25 \text{ at } 90^o = 6/5 \\
\text{Not improved} & \quad \text{pinhole.}
\end{align*} \]

* Received for publication, July 2, 1947.
The right eye shows a divergent strabismus with an angle of 40°. The eye movements are full, but the patient cannot fix with the right eye. There is no nystagmus. The eyes are of normal size. The pupils are round, regular, equal and react to light and accommodation. The right pupil reacts more sluggishly than the left. The right cornea shows evidence of past inflammation in the form of both superficial and deep vessels. The left cornea is clear.

*Ophthalmoscopic Examination*, Figs. 1 and 2.

Right eye. The most striking part of the fundus picture is the pseudo-optic disc which appears to be two and a half times the normal size. It is deeply cupped and of a dead white pallor. The upper half is rounded and well outlined and contains a rim of pink nerve tissue. The lower half is deeply cupped. The retinal level at the lower border of the disc is seen with a $-1.0$ D. whilst the floor of the cup may be defined with $-18.0$ D. The entire pseudo-disc is bordered by scattered pigment and on the nasal side is a white scleral ring.

The vessels in the upper half of the disc emerge from the pink nerve tissue within the disc surface, whilst below they dip over the steep edge of the cup and are lost to view.
Left eye. The condition is similar but not as marked. The retinal level at the lower border of the disc is seen best with $+0.5$ D. and the floor of the cup with $-6.0$ D. The vessels behave like those in the other eye. The intra-ocular tension is:

\[
\text{Right 20 mms.} \quad \text{Left 22 mms.} \quad \text{Schütz}
\]

There is a suggestion of a crater-like hole at 2 o'clock.

General examination revealed no other developmental abnormalities.

Discussion

The case is presented as an addition to the 50 odd cases recorded and recently reviewed by Steinberg of San Francisco.

The condition is usually unilateral when vision may be normal but is more often seriously defective. Bilateral cases have been recorded by Adler, Calhoun, Johns, and more recently by Magnus. In such cases one eye is usually blind whilst the vision in the other is nearly normal.

The most generally accepted theory of pathogenesis is that of von Ammon—"defective closure of the optic cup in its extreme posterior position. Associated is an abnormal development of the
surrounding mesoderm (precursor of choroid and sclera) with a later extension of the resulting scar tissue."

Johns offered as explanation a failure in development of the papillo-macular bundle the fibres of which would normally occupy the area of the cup. Such an explanation is inconsistent with vision such as that of the present patient, *i.e.* 6/5 (left).

The classification of such cases usually follows that given by Caspar who described three groups.

1. Cases in which all the vessels are coming from the lower portion of the pseudo-disc, even those which later turn upwards.
2. Cases in which vessels emerge at or a little above the centre—their arrangement being almost normal.
3. Cases in which the vessels appear at the circumference of the disc and appear to bend sharply around its edges.

The present case falls into the third group. The diagnostic features are: (1) Enormous size of disc, or what corresponds to disc. (2) Deep cup. (3) Dead white pallor.

The differential diagnosis must include for completeness: (1) Glaucomatous cupping. (2) Cavernous optic atrophy.

The first is excluded by a study of tension and fields. The latter occurs at a much later period.

I am indebted to Prof. Arnold Sorsby for the diagnosis of this case.

REFERENCES


**Caspar, J. H.** (1887).—Cited by Steinberg.


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**A CASE OF PSEUDO-GLAUCOMA**

**by**

**J. A. Magnus**

**York**

Cases showing typical glaucomatous cupping, but without increased intra-ocular pressure, have always aroused general interest. The various authors give them different names: amaurosis with excavation (*v.* Graefe), glaucoma without hypertension, primary cavernous optic atrophy (Schnabel), but I think Duke-Elder is right when he suggests that these terms should not be used. He calls these cases pseudo-glaucoma.
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