COMMUNICATIONS

CHANGES IN THE SELLA TURCICA IN FAMILY OPTIC ATROPHY*

BY

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In the Ophthalmoscope for August, 1916, appeared a paper by Mr. J. Herbert Fisher on "Leber's Disease (Hereditary Optic Atrophy): a suggestion as to its cause." It was pointed out that Leber in his original paper, published in 1871, had noted the occurrence of familial optic atrophy in patients who were the subjects of various nervous symptoms, such as headache, vertigo, tremors, and even epileptic attacks; that the optic atrophy was not infrequently preceded by some degree of optic neuritis, and that while central scotoma for colour and failure of central vision were characteristic, contraction of visual fields was rare. The explanation of Leber's atrophy as a result of retro-bulbar neuritis, it was pointed out by Mr. Fisher, was difficult to maintain in the face of certain facts such as the remarkably symmetrical fields in Mr. Simeon Snell's

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case which has been accepted as a case of Leber's disease. It is not easy to imagine, as Mr. Fisher remarks, an hereditary tendency to the isolated implication "of the optic nerve fibres by inflammatory processes close behind the eyeballs, and a special vulnerability of the papillo-macular fibres, with a tendency to synchronous onset in the two eyes at special epochs of life."

Nettleship in 1907* wrote a paper, "Central Amblyopia as a Symptom in Tumour of the Chiasma," and since then, as Fisher remarks, it has been noted that loss of the temporal field in chiasmal cases frequently starts as a central scotoma expanding to the outer periphery. Fisher's suggestion is that the condition known as Leber's atrophy is dependent upon some abnormal condition of the pituitary, and he points out in support of this the recognised neuropathic states occurring with Leber's disease, the occasional presence of vertigo, headache, or even epilepsy, and the fact that both in cases of Leber's atrophy and in undoubted cases of pituitary tumour, subjective phenomena of light and colour have been described. He also points out the well recognized intimate association of the pituitary with sexual functions, and states that the onset of Leber's atrophy is most likely to occur either at the

Changes in the Sella Turcica in Leber's Disease

Time of sexual development or with the commencement of sexual decay.

Some years ago Dr. Gordon Holmes and I published* observations on several cases of hereditary optic atrophy in a very remarkable family, the family C. Recently another member of the family was referred to me at Moorfields by Mr. Percy Flemming. When the paper by Dr. Gordon Holmes and myself was published this man was quite well, we were told by his brother. We did not have the opportunity of seeing him then. The history he gives bears out his brother's statement for he was quite well, he says, until October, 1917. Then at the age of 52 his vision suddenly altered, and when he was seen at Moorfields he had characteristic white discs and central scotoma for colours. He confessed to excessive smoking—4 ounces of shag a week. But what I wish particularly to draw attention to is the condition of the sella Turcica as revealed by X-rays (Fig. 1). It is long and shallow and the clinoid processes are certainly not normal. This X-ray photograph was taken within a few months of the onset of the affection. I was fortunately able to see again an older brother of this patient, one of the brothers whom

Dr. Holmes and I had seen and examined in connection with the paper already alluded to, now aged 60, and an X-ray examination of his pituitary fossa revealed, as will be seen, a similar and even more extensive change, the fossa being shallow and the clinoid processes much reduced (Fig. 2). In his case the visual failure had existed for ten years at the time the skiagram was taken. A photograph of a normal sella is shown (Fig. 3).

It is of interest with reference to the remark Mr. Fisher makes as to the curious symmetry of the fields in Simeon Snell's case, that in this patient also, whose fields we illustrated in the paper referred to, these were in some degree symmetrical. Two other points are also noticeable in the history of the ailments of different members of the family; (1) that in more than one the onset of the trouble was very rapid—almost sudden, without any premonitory symptoms, and the degree of visual failure did not increase, but remained almost what it was in the first few days, and (2) that one of the members of the family was actually under observation at the time at which optic neuritis was present, and that in his case the diagnosis at this time was that of intracranial tumour,—a diagnosis which his subsequent history showed to be almost certainly incorrect.

![Normal Sella Turcica](image)
I have thought it worth while to publish these observations as at all events of interest in reference to Mr. Fisher's suggestion. Personally I am of opinion that they strongly support his view. There can be no doubt that in each of these cases the sella Turcica is abnormal. But it is obvious that much work will have to be done and many observations made especially as to the condition of the fossa in normal cases, as well as in cases of Leber's disease, before any definite conclusions can be arrived at, and it may be remarked that the published cases of Leber's atrophy, almost certainly include cases which are referable to more than one category.

INTRANASAL DRAINAGE OF THE LACRIMAL SAC

A Report of 50 Consecutive Cases

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THE effective treatment of disease of the lacrimal passages has always presented difficulties to the surgeon. This is specially true in the case of hospital patients, who very often do not come for treatment until the disease has reached an aggravated and intense form. In very many of these cases there is great dilatation of the sac with regurgitation of muco-pus on pressure, or there is tear sac abscess, the result of the spread of the septic process to the tissues round the sac.

The old treatment of dilating the tear passages by frequent probing is in nearly all cases quite ineffective.

While a fairly large probe can usually be passed into the nose, adequate drainage is not established, and little or no lasting benefit results. Attempts made to secure better drainage by the wearing of styles, or by the introduction of threads to act as drains, have been made on a fairly large scale by some surgeons. This type of treatment, however, has never been very widely adopted, partly, I think, owing to the trouble it involves, and partly to its success being very moderate.

So troublesome are these cases of dacryocystitis that most ophthalmic surgeons have welcomed and largely employed the drastic method of complete excision of the tear sac.
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