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COMMUNICATIONS

SOME CASES OF ENCEPHALITIS LETHARGICA

BY

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THE cases which I am about to relate are, I think, of peculiar interest to ophthalmic surgeons. No doubt many cases have recently been erroneously regarded as cases of encephalitis lethargica, but, I think, although there is only clinical evidence in those I am about to relate, that there is little doubt that they are to be regarded as belonging to this category, and as diplopia or ptosis, or both these conditions, have been amongst the earliest symptoms complained of, and as some of them have in the first instance come under the observation of ophthalmic surgeons, they cannot fail to be of some interest to the readers of this journal.

1.—I saw, on August 20, 1919, at the instance of Sir James Cantlie, a young man of 28, who had been wounded—not seriously—in the knee in 1915. He was sent to Southampton, and was in hospital there for five weeks. He then went to his home in Hertfordshire on leave, and returned to the army dépôt at Hertford. From there he went to Windsor, and thence was sent to Ireland. He was transferred to the Air Force on account of his mechanical skill. Late in 1918 and early in 1919 he had an illness in Ireland. It was called “Rheumatism,” and was characterised

by feverishness, sleeplessness, and headache, which lasted a few days. He then became very drowsy, and had diplopia. He was discharged from the army in April, 1919.

When seen in August of that year he complained that he was easily tired, and could only do a very short day's work. He slept well, but his appetite was poor, and he sweated much, even without exertion. There was no sign of visceral disease. He then looked very stiff, and had all the aspect of paralysis agitans without tremor. There was no diplopia, no nystagmus, and his reflexes were normal. When seen in September, 1920, his condition was unaltered, except that the rigidity was perhaps not quite so marked.

2.—The next case is that of a soldier, aged 25, admitted to Queen Square on August 12, 1920, complaining of stiffness, tremor, dribbling of saliva, and difficulty in speaking and swallowing. His history is rather curious, and not very clear. He was in the army, and was wounded several times between 1915 and 1917: left arm, left leg, and right shoulder, but not severely. In November, 1917, he had a gun-shot wound of the head, left parieto-occipital region. He was unconscious for several hours, and was in bed for seven weeks. At first, on recovering consciousness, he had headache and giddiness, and this was increased when he began to walk. There was gradual improvement, and from February to June, 1918, he was able to be on light duty. In June he was passed "fit for service," and sent to Chatham. Then the headache got worse, and he had difficulty in writing and in other acts requiring fine hand movements, e.g., buttoning, and his speech was altered. He was sent into hospital at Chatham on July 4th, and on the 10th his head was operated upon for depressed fracture. The headache and dizziness were relieved after the operation, but he dribbled, his right hand was weak, and his right leg dragged in walking. Some improvement took place in the next few months, but while still in hospital, in November, 1918, he had an attack of "influenza." His temperature went up to 102° F.; he was very drowsy, and he had diplopia which has persisted. He is unable to say whether this was present before the operation. About July, 1919, his arms became more awkward and shaky, the dribbling more troublesome, and his face stiff. There is no real incontinence of urine, no change in reflexes, and the diplopia is especially troublesome in looking down. He sleeps badly, and groans in his sleep. Coughing is difficult, apparently because of the rigidity, and the whole aspect is that of a severe case of paralysis agitans.

In this case, if the history is correct, it is impossible to associate the condition with the feverish attack with drowsiness and diplopia in November, 1918, as many of the symptoms were present before, dating from about the time of the operation, but the latter aspect of the case is very suggestive.

3.—E. B., female, aged 39 years, two children healthy, no direct or suggestive evidence in her condition of specific disease, although the Wassermanin was mildly positive. There was much worry before her present illness began, and there is a somewhat unconvincing story from the patient of an accidental escape of gas and consequent gas poisoning, before the onset of symptoms. Three weeks before her admission on March 25, 1918, she had diplopia and double ptosis. She was seen at Moorfields by Mr. Fisher who referred her to me, and she was admitted to Queen Square. On admission she seemed very feeble, both eyes were almost closed, the right lids were swollen and the right cornea was anaesthetic. The pupils reacted normally and there was nystagmus to right and left.

There was double ptosis, divergence of the left eye, and weakness of all eye movements. All the movements of the head and limbs could be carried out, but the patient tired rapidly, her walk was stiff and her expression rigid and mask-like. All the reflexes were normal.

This patient gradually improved, but when last seen there was still great rigidity, although movements could be carried out fairly well and there still persisted divergence of the left eye.

4.—Case diagnosed as disseminated sclerosis.

A young married woman admitted under my care at Queen Square on account of diplopia with the diagnosis of "early disseminated sclerosis." No abnormality was present except slight nystagmus and some general weakness. All the reflexes were normal and this, of course, excluded disseminated sclerosis. The history was significant. A few weeks before admission she became ill—very drowsy, but could be roused to take food. After partaking of food she at once went to sleep. There was no history of delirium. The sleepiness had passed off before her admission and the diplopia gradually ceased to trouble her. A little nystagmoid jerking was still present when she left the hospital. I cannot but think that this was a mild case of encephalitis lethargica.

5.—Another case was seen in private—a young healthy man of 35 years of age who had been overworked for a long time. Diplopia was the first trouble in his case, and when I first saw him he had obvious weakness of one sixth nerve, an observation confirmed by the ophthalmic surgeon with whom I saw him. He had been sleeping badly. I advised him to go to bed at once and he did so. At first his sleep was not good, then it became abnormally sound and prolonged. There was a rise in temperature and slight delirium. He gradually improved and ultimately became quite well. I think this was certainly a case of the same nature.

6.—The next case is that of a doctor in private practice. On Christmas night, 1918, he had a violent attack of diarrhoea and vomiting. He had not felt well that day, and had eaten sparingly.

After recovering from this he never felt really well again, had various vague pains, thought to be rheumatic, and sensations as if his head were being drawn downward and forward. He had diplopia for several weeks before actually going to bed, and had also bluish mists before his eyes. He engaged a *locum tenens* apparently about January 20, and went to bed. The following day he was practically comatose, and had no recollection for several days after this. I saw him on February 25 with Dr. Randall, Wimbledon. He was then partially conscious, with double ptosis and defective eye movements. He gradually improved, and in two months was at work. I saw him about a year later. He had continued at work and was able to carry on without much difficulty. No defective ocular movements were present, but he complained of stiffness, and his aspect was that of a patient with slight paralysis agitans without tremor. He has continued to improve steadily.

These cases, in which the affection was not severe—numbers 4 and 5—are, I think, of peculiar interest, for the symptoms were comparatively slight and the recovery was practically complete. The other cases are more marked, evidently the result of a more severe intoxication, but in all of them the eye symptoms were distinct and in some of the cases striking.

A CASE OF MELANOSARCOMA CONJUNCTIVAE BULBI

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ALTHOUGH melanosarcoma of the interior of the eye is not very rare, similar tumours of the exterior are only exceptionally met with. As the latter tumours show considerable differences in their clinical progress when contrasted with the former, we consider that an elaborate account of the history of such a tumour should prove of value, especially as some general conclusions may be drawn from our account.

Our patient was born in 1881, and first came under observation in the autumn of 1916. She had noticed a small black spot the size of a pin's head on the left conjunctiva during the last ten years, and thought that it had become a little bigger in the last few years. Very recently a small red blister had appeared, and it was on account of this that she sought medical assistance. The patient has always been healthy and has had five healthy

It would appear that more careful study of the peripheral fundus with binocular indirect ophthalmoscopy is warranted in patients with angioid streaks, to assess the frequency of associated ophthalmoscopic findings as well as their clinical significance. The histological picture of scar tissue growing into dehiscences of Bruch's membrane accounts for the not infrequent distressing loss of central vision in some of these patients. The tendency to the involvement of blood vessels elsewhere explains the calcification of peripheral vessels noted in lateral roentgenograms of the legs in this disorder. For the same reason, a search for angioid streaks should be made in persons with repeated gastrointestinal tract haemorrhage despite repeatedly negative radiological studies. These points are helpful in diagnosing cases of the Groenblad-Strandberg syndrome when the fundus lesions may be more subtle than those in the patient here described.

Summary

The first reported fluorescein fundus photographs of angioid streaks are presented. Fluorescence appeared in the streaks in the arterial phase, increased in the venous phase, and tended to persist for a time even after the retinal vessels had cleared themselves of the dye. A fundus change seen in this patient somewhat resembled the cutaneous changes of pseudoxanthoma elasticum, and for this the term *peau d'orange* fundus is proposed.

Grateful acknowledgement is made to Dr. Lorenz Zimmerman for use of Fig. 11.

REFERENCES

- NORTON, E. W. D., SMITH, J. L., and JUSTICE, J. *Trans. Amer. Acad. Ophthalm. Otolaryng.* (In Press).
SMITH, J. L., DAVID, N. J., HART, L. M., LEVENSON, D. S., and TILLET, C. W. (1963). *Arch. Ophthalm. (Chicago)*, **69**, 51.

ADDENDUM

Since this article was submitted, our attention has been drawn by Dr. David Paton to a previous report of the mottled or *peau d'orange* fundus in association with angioid streaks. This paper by K. Shimizu is entitled "Mottled Fundus in Association with Pseudoxanthoma Elasticum" (*Jap. J. Ophthalm.* 5(1): 1-12, Jan. Mar. 1961); it is written in English and has excellent illustrations, and Fig. 3 is strikingly similar to Fig. 6 in the present paper. More attention should be devoted to the "salmon spots" also seen with angioid streaks.