MARKED PAPILLOEDEMA IN PULMONARY EMPHYSEMA

BY

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The following case appears to be unique and consequently may be of interest.

P. B., a male, aged 34 years, a coalminer, was admitted to the medical wards of the Royal Infirmary, Edinburgh, on October 26, 1932, under the care of Professor Murray Lyon, to whom my thanks are due for access to the notes on the general condition.

His complaints were:
(1) "Shortness of breath of two years' duration."
(2) "Defective vision in both eyes of two months' duration."

On examination by Professor Murray Lyon the case was diagnosed as one of extreme emphysema, unusual in the fact that the cyanosis and congestion were confined to the upper part of the body.

Examination on admission showed:

A well-developed deeply cyanosed man, lips and ears dull purple; centre part of the face deep bluish red; breathing shallow and apparently difficult; eyes prominent and congested; fingers clubbed.

Blood pressure normal, 130 mm. Hg systolic, 85 mm. Hg diastolic. Heart: sounds closed.

Alimentary system: no history of vomiting at any time.

Spleen not enlarged.

Central Nervous System: no loss of motor or sensory power.

Reflexes: pupils equal and active to light, direct and consensual, and to accommodation. Other reflexes showed no abnormality.

Cranial Nerves:
(1) Subjectively unimpaired.
(2) Mistiness, dimness and, occasionally, vision only for movement.
(3) Slight ptosis of left eyelid dating from infancy.
(4) No nystagmus.
(6) No nystagmus.
(7) Nothing to note.
(8) Nothing to note.
(12) Nothing to note.
No headache. Wassermann Reaction negative.
Careful repeated examination failed to reveal any disease of nervous system.
Urine: nothing abnormal.
Dark Room examination revealed: intense venous congestion of both retinae, all the veins being bulging, tortuous, definitely plum-coloured and several times the calibre of the arteries; some small flame-shaped haemorrhages were seen in the region of the discs, particularly in the left eye. In each eye there was an extreme degree of papilloedema of the hob-nailed variety with steep banked edges and with plum-coloured congested veins.
On direct examination the swelling in the right nerve head measured 5 D., in the left nerve head 6 D. Right vision 6/6 and J. 1. Left vision 6/12 and J. 2.
The field in each eye was not contracted on examination with medium-sized objects.
On examination on November 3, 1932, the patient was found sitting up in bed and reading. The swelling of the discs appeared to be a little less marked.
On December 1, 1932, the patient's general condition was so far improved that he was examined again prior to discharge. The few retinal haemorrhages had by this time completely disappeared. The distension of the veins was still marked and the tortuosity more pronounced. The swelling of the discs was not so congestive.
The right papilloedema measured 4 D.; the left about 5 D.
The field in the right eye on examination at the perimeter with a 10 mm. object was practically full with a slope into the 30° circle in the lower nasal quadrant but the field in the left eye was concentrically contracted down to about the 15° circle with a 20 mm. object. The consecutive atrophy appears likely to lead to blindness.
The patient's chest condition and his general condition are now much better. He has not at any time, although under continual observation, shown any signs of any intracranial disease.
As far as I have been able to review the literature I have not come across a similar condition.
Mackenzie\(^1\) refers to a case with great tortuosity of the retinal veins in a man the subject of emphysema but there is no reference to swelling of the optic disc.
Pick mentions a case of emphysema with great dyspnoea and retinal haemorrhages in both eyes.

I am indebted to Dr. Traquair for checking the measurements of the swelling of the discs and for his courtesy in permitting me to publish this case.

REFERENCES

ANNOTATION

The Certification of Blindness

A paper under the above title is contributed to the Medical Officer of December 24, 1932, by N. Bishop Harman. In it he refers to a previous paper by Dr. G. W. N. Joseph in the issue of October 29, which deals with the report of the Union of Counties Association for the Blind, in which the author demands (1) a single definition of blindness; (2) a uniform certificate; for which purpose he gives his support enthusiastically to the form devised by the Union of Counties Association. We have not seen Dr. Joseph's paper, but any remarks by Bishop Harman must of necessity hold the attention of all ophthalmic surgeons. Bishop Harman calls attention to the steady increase shown in the numbers of the blind year by year since provisions for the blind have been devised by legislation; and this in spite of the success obtained in the diminution of blindness in children from ophthalmia neonatorum. This large increase is in the number of the blind in the later years of life, and it is likely that the increase is due to increasing disclosure of cases rather than to any additional production of blindness. It is now worth while for a blind person to disclose his disability, and we should be the last to complain that this is so. But it is only reasonable to demand some assurance that only the genuine economically blind are receiving benefits.

A single definition of blindness from the point of view of the legislature is impossible; for certification is required under three separate Acts of Parliament, namely, Education, Blind Persons and Old Age Pensions. From the education point of view blindness means that a child is unable to see to read the ordinary school books. For the Blind Persons and Old Age Pensions Acts blindness means "so blind as to be unable to perform work for which eye-sight is essential." The wording differs, but in effect they have the same meaning, since for the child the reading of books is its work.