treatment of eye injury belongs to a highly specialized branch of surgery, and should not be undertaken in a light-hearted manner by the general practitioner. If the doctor is in any doubt he should not hesitate to obtain expert advice. In his evidence before the Workmen's Compensation Committee Mr. Pooley (Q. 19,787) states that in Belgium special hospitals or wards, subsidized by the State, undertake the treatment of eye injuries for small fees. In this country the general opinion is against State interference, but both employee and employer have the right to demand adequate medical attendance.

SUMMARY.

What is the position of the workman and employer at the end of the period under review?

Workmen.—Forty-four men have lost the use of one eye and nineteen have developed nystagmus.

Settled for lump sum ...	...	...	19
Working full time ...	...	...	98
On half difference ...	...	...	11
Playing ...	...	...	35
Time lost at five turns a week = 17,250 shifts.			

Employer:

Loss of output corresponding to time lost by workmen.
Expenditure in compensation, £8,286.
Liability of 68 unsettled cases.

It is the custom of employers to reserve a lump sum for unsettled cases. In the Yorkshire coal field one mutual indemnity society has reserved nearly three-quarters of a million pounds for all unsettled cases (Gillhespy, Q. 5731, Workmen's Compensation Committee). The money thus put by is not available for the purpose of expansion of work, and is a very considerable drain on small employers.

REFERENCE.

¹ T. Lister Llewellyn, *Journal of State Medicine*, August, 1920, p. 238.

THE DROOPING SHOULDER SIGN OF
PHTHISIS.

BY

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OF the last 50 consumptive cases (to go no further back) sent me for diagnosis, in just half there has been present a physical sign not mentioned in any British textbook. On the affected side, or (generally) the side of more extensive or older disease, the point of the shoulder and the nipple are lower than on the other side; the nipple is also smaller and seems to lie further back. Behind, the scapula is lower—its inferior angle may reach 3 in. below that of its fellow—and is at a different distance from the spine, mostly nearer to it. Muscular atrophy also is noticeable, a little of the pectorals, but far more of the upper part of the trapezius. The superior border of that muscle, instead of running straight from neck to shoulder, is flattened, wasted, hollowed out, so that, as compared with the opposite side, much less of it shows above the clavicle when viewed from the front, and above the spine of the scapula when viewed from behind. The sign occurs indifferently in men and women, although more marked in the former; and as regards association with the type of phthisis, in this order of descending frequency—juvenile hilus cases, a rather large proportion; third stage cases (Turban-Gerhardt), very nearly half; first stage cases, nearly half; second stage cases, about a quarter. I have seen it develop in the course of a few weeks. Photographs may be seen in a book of mine.¹

The above is the sign in full force. Krönig² says that in early tuberculosis of one apex the scapula of that side may be further from the spine, and often lower, than its fellow; in respiration its movement may lag; while in males and nulliparous females the corresponding nipple has likewise a lower level. The textbooks of Schröder³ and of Bandler⁴ cite different authors who have noticed atrophy of the shoulder muscles on the affected side, while the latter mentions Aufrecht's observation, that on the side of disease the acromial end of the clavicle, mostly higher than the sternal one, may dip below it.

As to causation, the sign is pretty certainly tuberculo-toxic in origin; a somewhat similar asymmetry described

in lunatics is unaccompanied by muscular atrophy. The characteristic unilateral trapezius atrophy suggests that the weakening of this muscle in its upper part causes the corresponding half of the shoulder girdle to sag with the weight of the arm. The natural muscular inferiority of the left side has nothing to do with it, for the right trapezius is oftener affected than the left, agreeably with the fact that the right lung is more frequently tuberculous. I have seen a case, too, where the trapezius on the healthy side was much bigger, although scarred by a penetrating gunshot wound. Pottenger,⁵ like Fischer, describes spasm of the muscles overlying a tuberculous apex, ascribing it to reflex irritation reaching the muscle from the chronically inflamed lung by nervous paths (sympathetic to the cord and thence motor). The spasm goes on to pulpy degeneration. He does not mention atrophy, which seems to me far commoner than either spasm or pulpiness. Probably the spasm quickly goes on to atrophy. In bone and joint tuberculosis muscular spasm and atrophy are very common phenomena.

Lastly, the sign has great practical value. It is clear, objective, definite. It has commended itself to the general practitioners of my district, and to a Pensions Board. In children's phthisis, in chronic bronchitis complicated by a little patch of tubercle, it comes like a beacon.

REFERENCES.

¹ *Three Clinical Studies in Tuberculous Predisposition*, London, Allen and Unwin, 1917. ² Krönig: *Die deutsche Klinik am Eingange des Twanzigsten Jahrhunderts*, 1907, p. 653. ³ Schröder and Blumenfeld: *Handbuch der Therapie der Chronischen Lungenschwindsucht*, 1904, p. 88. ⁴ Bandler and Roepke: *A Clinical System of Tuberculosis*, Hunt's translation, 1913, p. 42. ⁵ Pottenger: *Beiträge zur Klinik der Tuberkulose*, Bd. 22, H. 1.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

OPHTHALMOSCOPIC APPEARANCES IN CERTAIN
RARE CASES OF DIABETES.

THE ophthalmoscopic appearances in diabetes mellitus do not usually present any characteristic changes; in a few cases diabetic retinitis is detected (7 per cent. in a consecutive series of my own cases); but in certain very rare instances, associated with a special blood condition, a striking change is seen. The retinal blood vessels, instead of having the normal deep red colour, all appear milky white or pinkish white, whilst the rest of the fundus has the normal red colour.

To the naked eye the blood in diabetes does not usually present any striking alteration in appearance, but in a few very rare cases the blood is light pink in appearance. It has the colour of blood-stained pus, and is thicker than normal blood, being in appearance somewhat similar to anchovy sauce, but with a brighter tint. In some of these cases the ophthalmoscopic changes in the retinal vessels just described have been detected. It has been stated that chemical examination has shown that the fat in the blood has been increased in these cases, and the condition has been described as "lipaemia."

I do not know by whom the ophthalmoscopic changes were first described. I read of them ten years ago, and a small number of cases are on record; but as the condition is not well known, the following brief note may be of interest to those who are devoting attention to ophthalmoscopic examinations in medicine:

A man, aged 22, was sent to me for consultation by Dr. H. Ramsden of Dobcross, on account of severe diabetes mellitus. Sugar had been detected in the urine six months previously. Thirst and diuresis had been prominent symptoms, and he had suffered from a carbuncle on the neck. In the routine examination of the blood I was surprised to find that it had not the ordinary deep red colour, but was light pink in colour and very thick. It had the appearance of blood-stained pus, or of anchovy sauce, but with a brighter tint. I examined the eyes with the ophthalmoscope and detected what I expected—the peculiar changes in the appearance of the retinal vessels of which I had read many years ago. All the retinal blood vessels and branches thereof were white; the retinal veins were cream white, the retinal arteries were cream white with a slight pinkish tinge. The optic discs were normal. The rest of the fundus had the normal red colour. Vision: R. 6; L. 8. This ophthalmoscopic appearance is probably characteristic of the blood condition just described.

I fixed an appointment for a further blood examination, but the patient was too ill to keep the appointment. It