

denly as it came on. It may produce double vision. Any of the muscles may be paralyzed, therefore the squint may be in any direction. Although usually temporary, the squint may be permanent.

2. Ptosis.—The ptosis of tabes may be single or double; generally it is single, only one lid drooping. The ptosis, like the squint, may be temporary or permanent.

3. The *fixed*, or immobile pupil.—On looking at the pupils, no abnormality may be observed. Upon covering them with the hands, however, they do not dilate, nor on exposing them to a bright light do they contract. They are fixed—immovable. (They do diminish in size, however, on convergence; this is the Argyll Robertson pupil).

4. Another pupillary symptom is seen in tabes, namely, inequality. This is generally due to the contraction of one pupil. The vast majority of tabetic patients have one or other of these pupillary symptoms. Berger claims that 97 per cent. of cases of locomotor ataxia show some pupillary symptom.

5. Optic Atrophy.—This produces more or less failure of sight. The atrophy is “grey” and it is “primary.” The retinal vessels are not affected in size.

These, then, are the eye symptoms which are encountered in tabes, viz.: Strabismus, ptosis, fixed pupils, unequal pupils, and optic atrophy. Are they the earliest indications of tabes? Osler puts “pains” as the first of the pre-ataxic symptoms. Unquestionably, the diagnosis of tabes is generally made first from the pains; but that is readily explained by the fact that pain speedily drives a man to his physician, but fixed pupils do not. For a fixed pupil produces so little inconvenience, that it may exist for months before it is noticed. But even when pain sends the patient for advice, how often the doctor will find Argyll Robertson pupils existing at the same time? The same remark may be made in regard to loss of the knee-jerk. In such cases, then, the eye symptom has preceded the pain, although it was not noticed. And not infrequently this symptom (fixed pupil) is noticed long before the pain comes on. So with the other ocular symptoms. A patient, in adult life, consults his physician for a suddenly-appearing squint, or ptosis, or for an optic atrophy, and he may have had no pains or other noticeable symptom of tabes. If no cause is discovered for these eye symptoms, we are certainly justified in suspecting locomotor ataxia. In such cases, the eye symptoms are the earliest indications of the disease.

Cases are on record making all these facts clear. Neurologists and ophthalmologists the world over are insisting more and more upon the importance of these ocular symptoms as being among the earliest indications of the disease. In this connection I