

Apoplectic effusions.

Opium poisoning.

Epileptic fits.

The contracted and fixed pupil may be present in any of these.

But the apoplectic or epileptic condition, and opium poisoning, are usually easily recognized, so that we have only to differentiate between *tabes dorsalis*, and the use of myotics.

The history of the cases would quickly enable us to decide, but the standard methods of examination for a case of *tabes* (the use of the convergence test, etc.,) should be brought into use. Summing up list "a" it may be said that contracted and fixed pupils point, in the majority of instances, to a case of *tabes dorsalis*.

II. But the pupils, although contracted, are *movable*. The principal use of recognizing this condition is that it enables us to be almost sure that we have not before us a case of locomotor ataxy.

III. The pupils are evenly dilated and *fixed*.

This is a rare condition. Looking at list "b," it may be stated that some movement of the pupils may be elicited in all the conditions named, except in blindness (*Amaurosis*), the use of mydriatics, and in complete paralysis of both third nerves.

IV. The pupils are evenly dilated and *movable*.

Little need be added to what was said under the last heading. Of course it should be noted that in the last stages of intra-cranial tumors and effusions, no movement of the pupils can be elicited.

V. The pupils are uneven but *fixed*.

This condition almost surely points to one of two things—it is either Locomotor ataxia, or it is General Paralysis of the Insane. The size or shape of the pupil will not help us to differentiate between these two affections, but the history will quickly clear the matter up. Looking over the remaining portion of list "c," it may be stated that in unilateral lesions of the third or the sympathetic nerves, the pupil of one eye would be found to react freely, and in affections of the fifth nerve, both pupils would react, but the smaller one less freely than the larger. In old Iritis care must be taken, for sometimes, the adhesions are so extensive as almost to bind the iris to the lens, to a large extent preventing movement. In every doubtful case a drop of atropine solution should be used. This will solve the difficulty, for the pupil will dilate between the adhesions, thus giving a notched appearance to its edge. And unless we have a case of doubtful iritis, the pupil of the other eye will react to light. In all the remaining affections of list "c" movement would be seen in one pupil.