

Ataxic, when inco-ordination has produced the staggering gait.  
3rd. Paralytic.

It is in the pre-ataxic stage that the greatest success may be looked for in treatment.

To emphasize this fact, let me quote from a great European authority, Babinski, a sentence giving the results of his own experience. He says: "I believe I do not exaggerate when I say that in my hospital practice I see from 200 to 300 cases of tabes each year, and of this number I do not see more than 15 to 20 who are clearly ataxic subjects. In my private practice I have numerous patients who have for many years been affected with tabes, as judged by its characteristic signs, and who, without retaining an absolutely perfect form of co-ordination, have continued at their usual employments, and have never passed the so-called pre-ataxic stage."

Judged by the older conceptions of this disease, when it was looked upon as almost hopeless, and reading such a statement as this, we may well say: How is it possible to attain such brilliant results? I answer, Because now the pre-ataxic stage can be recognized, and the case brought under treatment early. If we think for a moment of the morbid anatomy, we can see how hopeless, in the majority of instances, late treatment would be; although, even in late cases, arrestment of the disease can be accomplished. The principal morbid changes found, as we know, are sclerosis of the posterior columns of the cord, and foci of degeneration in the basal ganglia. Now, ataxy does not appear until the posterior columns have degenerated. If these columns are destroyed, irreparable damage has been done. True success consists in preventing destruction of nerve tissue; to do this, we must be able to recognize the pre-ataxic stage. What are the symptoms of this stage?

Osler gives them as (1) pains, (2) ocular symptoms, (3) loss of the knee-jerk. These are all pre-ataxic symptoms, but it has not yet been definitely ascertained which, in the majority of instances, is the earliest. I believe the ocular symptoms will be found to occupy that position. The eye symptoms are, of course, well known to all of us. Some of them are found in almost every case of locomotor ataxia.

But it will be well to get these symptoms clearly before our minds; then we shall endeavor to determine the question of their priority and of their value.

They are (1) strabismus, or squint; (2) ptosis, or drooping of the eyelid; (3) the *fixed* pupil (Argyll Robertson pupil); (4) inequality of the pupils; (5) optic atrophy.

1. The strabismus of tabes has characters of its own. It often comes on suddenly. It is very likely to be temporary. It may last but a few days or weeks, and may recover as sud-