vidual, it is much more liable to happen in places where the accumulation of patients is considerable, especially if the enteric form of malaria prevails, if hygienic rules are neglected, or if the fæcal matters are retained or thrown in the vicinity of these places.

Selected Articles.

LOCOMOTOR ATAXIA — AMYOTROPHIC LATERAL SCLEROSIS—LATERAL SCLEROSIS.

CLINIC BY H. C. WOOD, M. D., PHILADELPHIA.

GENTLEMEN, this patient comes to us with the statement that every two or three weeks, or sometimes at longer intervals, he has frightful attacks of abdominal pain accompanied with vomiting. Under these circumstances, attention is naturally directed to the condition of the stomach. We learn that these attacks are not provoked by any error in diet, that they are apparently spontaneous, and that between the attacks there are no symptoms of dyspepsia or indigestion. The attacks are exceedingly violent. The patient came to the hospital two weeks ago. When I first saw him, he appeared to be suffering from no severe symptoms. A day or two later, I found him in bed, groaning and moaning as though in agony. There was frequent vomiting of mucus tinged with bile, or of a liquid so thin as scarcely to be called mucus. These attacks of pain with persistent vomiting lasted three or four days and kept the man from sleeping, in spite of the free use of opium. Such attacks are evidently not dependent on irritation of the mucus membrane of the stomach.

The pain would suggest the passage of gall stones. Careful examination, however, shows that the pain lacks the sudden cessation which is characteristic of biliary colic. It is a steady, unbearable pain, lasting for hours and days and unaccompanied with jaundice, disturbed digestion, or any other manifestation of the passage of biliary calculi. You will call to mind the case of the woman with attacks of pain, similar to these, occuring in the rectum, which I showed you last week. When you have brought to your notice a case of horrible, recurring, violent, unaccountable pain, remember the possibility of its being one form of crisis occurring in locomotor ataxia. Sometimes these paroxysms of intense, shooting, darting, tearing, boring pain attacks the genital organs.

When I found this man sitting at his bedside, my attention was at once directed to his pupils. I found that they were very small, in other words, he had a distinctly myotic or contracted pupil. When I shut off the light with my hand, I found that the pupil did not dilate. It was, indeed, insensible to light. I then tried the pupillary reflex, but there was no dilatation of the pupil produced by pinching the skin of the neck. Then I asked him to look at my finger held close to his face and a moment later to look at a distant object, and found that the pupil which was immovable to light, and responded not to peripheral irritation, reacted normally to the movements of accommodation. Our patient has, therefore, that comparatively rare pupil known as the Argyle Robinson pupil, because first described by that gentleman.

Before going further with this case, I wish to say a few words in regard to conditions of the pupil as seen in nervous affections. We have as the afferent nerve, so to speak, going from the eye to the centre within the brain, the optic nerve. We have two centres, connected as motor centres with the pupil, the oculo-motor centre and the spinal dilating centre, situated high in the neck. What happens when a person's neck is pinched? An impulse is sent through the sensitive nerves which reaches the cervical centres, lying in the upper part of the spinal cord. As a result, there goes out from the cervical sympathetic ganglia, an impulse causing dilatation of the pupil.

Again, the pupil contracts with exposure to light, and dilates when the light is withdrawn. This is especially accomplished through the oculo-motor centres. The optic nerve is the afferent nerve. Its fibres run through certain centres in the neighborhood of the thalmus opticus and then pass down to the corpora quadrigemina and oculo-motor centre. As a result of exposure to light, there is oculo-motor stimulation and the pupil contracts.

Then as to the movement of accommodation. When a near object is looked at, the eyes are brought convergent as to their axes, and at the same time, the pupil contracts and the shape of the lens is altered for the purposes of distinct vision. These are so-called consentaneous or associated movements, that is, movements which habit or the original construction of the nervous system has brought about as always being performed together. They apparently take place through the oculo-motor centre. An impulse from the upper cortical region of the brain is sent down to the oculo-motor centre for the act of accommodation, and the centre sends out an impulse which contracts the pupil, and at the same time, converges the eyes.

Besides these various movements of the pupil, there are others associated with emotional conditions, but we have been unable to study these in this case.

In the Argyle Robinson pupil, there is want of response to light and to reflex irritation from the skin, but the pupil does respond to alterations of