Actually these lesions began some three weeks before, represented by y_1.

In like manner the cerebrospinal fluid shows pathological changes in the generalized stage, and this is also represented by y_1.

Clinical evidence of involvement of the central nervous system is late in appearing, years in many cases, being shown by z. As shown by cerebrospinal fluid examinations in early cases, it is found that the infection actually took place during the generalization of the virus, namely, z_1.

Thus there are two curves, one representing the clinical course of the disease, the other representing the actual beginning of each particular lesion. These curves I designate, respectively, the clinical curve and the genetic curve.

The great danger in syphilis is not the initial lesion or the lesions of generalized syphilis, but lesions of the central nervous system. It is this type of case that is of grave national import.

Mott [8] says, "When once the trypanosome organism (*Treponema pallidum*) has entered the cerebrospinal fluid it is doubtful if it can ever be eradicated."

Therefore, the ideal treatment would be to prevent involvement of the central nervous system. Examining these curves, it seems almost hopeless to attain this. There is barely time to recognize the primary lesion before the central nervous system is involved. Therefore, it is of the utmost importance to diagnose the primary lesion quickly and accurately, and inaugurate treatment at once.

It is a good axiom to consider every sore of the genitals as syphilitic, until proved otherwise.

It is generally accepted that the longer the central nervous system has been involved, the more difficult it is of cure. The only hope is to check the process.

Harrison [9] has shown that the Wassermann reaction is more difficult to render negative in generalized cases than in primary cases which have positive Wassermann. Also, that it is more difficult in the later cases than in primary cases which have negative Wassermann.

Thus lines of treatment may be drawn on the graph. If treatment be delayed until the central nervous system becomes clinically involved, as at a_1, before inaugurating treatment, it is doubtful whether the individual can ever be cured, so that the line of treatment, beginning at a_1, proceeds at an acute angle, and does not intersect the clinical curve.

But if treatment is inaugurated early at b_1, it is possible to render the Wassermann reaction negative and free the patient of all clinical evidence of the disease.

If treatment is inaugurated as soon as the primary lesion appears at c_1, when the patient has a negative Wassermann reaction, there is hope of preventing even the involvement of the central nervous system. In other words, the c_1-c_2 line of treatment intersects the genetic curve, and the virus is prevented from gaining access to the central nervous system.

Therefore, it is absolutely essential for successful antiluetic treatment to diagnose and treat the disease as soon as the primary lesion becomes apparent.

The purpose of this graph is to simplify and emphasize the importance of the early diagnosis and treatment of primary syphilitic lesions.

REFERENCES.

[1, 2] KNAPP, E. V. *American Journal of Syphilis*, October, 1917.
[3, 4] KAPLAN, D. M. "Serology of Nervous and Mental Diseases."
[5, 6, 8] MOTT, F. W. *Journ. of State Med.*, September, 1917.
[7] HARRISON, L. W. *Journ. of State Med.*, September, 1917.
[9] HARRISON, L. W. *Brit. Med. Journ.*, May 5, 1917.

The "Medical Supplement."

INFORMATION has been received from the Medical Research Committee that the June and subsequent numbers of the valuable *Medical Supplement*, published by them, and issued by the General Staff, War Office, are placed on sale, and are obtainable either directly or through any bookseller from H.M. Stationery Office (Imperial House, Kingsway, London, W.C.2), price one shilling net per copy. This arrangement does not affect the distribution of official copies. There will doubtless be many officers of the C.A.M.C. who desire to possess for themselves copies of this most valuable periodical.

MEETINGS OF CLINICAL SOCIETIES.

MEDICAL SOCIETY OF THE GRANVILLE CANADIAN SPECIAL HOSPITAL, BUXTON.

THE monthly meeting of the Granville Canadian Special Hospital Medical Society was held in the main building on Wednesday, May 9, 1918, at 8 p.m., Colonel J. T. Clarke, C.A.M.C., in the chair. Major F. H. MacKay was elected President by acclamation, in place of Lieutenant-Colonel A. MacKenzie, returned to Canada.

Major Robson presented his special *Apparatus for the Intra-tracheal Administration of an Anæsthetic*. He reviewed briefly the history of anæsthesia and the evolution of the different methods. He claims the following advantages for his apparatus. (1) Ether vapour delivered near the bifurcation of the trachea, thus eliminating the dead space. (2) Ether vapour delivered at body temperature. (3) A moist ether vapour is used. (4) No post-operative vomiting. (5) Economy of ether.

Captain W. F. Dey presented two cases of *Hysteria in the Male*.

(1) Hysteria simulating cerebellar lesion. Private S., No. 894291, C.L. Battalion. In August, 1915, he was dragged a distance in a stirrup, and was unconscious for three weeks; clear mentally when in England October, 1915. Sent to Depôt December, 1915, and was returned to France December, 1916. Immediately on return to France he noticed unsteadiness on his feet, and the appearance of severe headaches every second or third day. There was a feeling of weight on the top of his head. Symptoms became gradually more severe until April, 1917, when he reported sick. At this time he was staggering all the time as if he were drunk, and the headaches were constant. Sent to hospital, where he was boarded to a Labour Battalion; carried on until January, 1918, when he was sent to England.

On March 15, 1918, he was admitted to Granville Canadian Special Hospital. Examination at this time showed a marked unsteadiness upon his feet, inclining constantly to the left. There was a coarse nystagmus to the left and nystagmus on whirling. Pupils both slightly irregular, left somewhat larger than the right. Reflexes active, discs clear. No sensory or reflex disorders. Clumsy in all movements of the left hand. Wassermann of blood negative. Wassermann of cerebro-spinal fluid negative. Noguchi and colloidal gold tests negative. No cells in the fluid. Other systems normal.

This man was constantly in trouble because of his gait, having been arrested a number of times for being drunk. He walked in a most peculiar way in that he would go four paces when he would lurch to the left; he would recover himself, walk another four paces, and then would lurch to the left again. The staggering became so pronounced finally that the condition was diagnosed entirely functional. On April 29 and 30 he was given wire brush applications, when the gait immediately became normal and station steady.

(2) Gunshot wound of the neck, causing contracture of all muscles. Private M. 525673, 49th Battalion. Went to France April, 1917, wounded August 25, 1917. A bullet entered over the spinous process of fourth cervical vertebra, with exit 2 in. behind and 1 in. below tip of right mastoid process. X-ray report at this time showed fracture of the spinous process of the axis. He was placed in a plaster helmet, which was rigid, with a shoulder plate. Admitted to Granville Canadian Special Hospital April 17, 1917. X-ray showed nothing abnormal. Right pupil slightly larger than left, but this was noticed in childhood. All systems normal. Helmet removed. There was a marked ataxic movement of the legs which could be corrected on effort. After persuasion he could move head slightly; unable to stand alone, great difficulty in walking even with support on both sides because of spasmodic contraction of both legs. Spasm of all muscles of neck and back. With encouragement and by his own effort developed 10 degrees of antero-posterior movement of the neck, but the gait remained the same. With strong wire brush applications the gait became normal and all movements of the neck free.

Captain Patterson presented cases of *Metatarsalgia* and *Pes Planus*. He led in a discussion on the care of soldiers' feet, and pointed out the extreme importance of providing men with shoes that are large enough.