

mental and physical development became arrested. Physically the patient was the subject of infantilism and presented many of the stigmata of degeneration, including double cryptorchidism. He had Hutchinson's teeth, fine tremors of the hands, tongue and lips, paresis of the lower extremities, diminished knee-jerks, pupils unequal and not reacting to light, Babinski's sign present. Examination of the cerebro-spinal fluid: Wassermann reaction positive, hyper-leucocytosis, lymphocytosis. Syphilides made their appearance in the form of radiating fissures extending from the angles of the mouth backwards along the internal surface of the cheeks. The tongue was similarly affected. Later on the patient had a seizure, and after this both speech and mastication became impossible. From this time on the patient was only able to take liquid nourishment, and the general physical condition became gradually worse. A bed-sore formed over the sacrum. Treatment by subcutaneous injections of neosalvarsan every six days was instituted, and though this was attended with decided improvement for a time, a stage was reached when it lost its effect, the disease rapidly progressed and the patient died. At the autopsy a condition of diffuse meningo-encephalitis was found.

This case is of interest not only because of its comparative rarity, but also because it furnishes further proof of a direct pathogenic action of the spirochæte in general paralysis. The facts observed are in direct opposition to the arguments of those who support the parasymphilitic theory quoted above. Thus, to take the statement that specific treatment is useless and sometimes harmful, it should be noted that as a result of the injections the patient actually recovered his lost speech for a time. Again, though there was an absence of syphilitic antecedents in the case, examination of the cerebro-spinal fluid proved beyond dispute that syphilis was the cause of the disease. Moreover, the presence of the spirochæte was further evidenced by the appearance of characteristic muco-cutaneous lesions which yielded rapidly to the treatment.

NORMAN R. PHILLIPS.

*Neurosyphilis in Ex-Service Men.* (*Amer. Journ. of Nerv. and Ment. Dis.*, June, 1922.) Price, R. H.

This is an account of the treatment and results obtained in a group of cases in ex-service men. The symptomatology and serology of the disease in ex-service men appeared identical with any other similar group of patients, but the average age when the symptoms became noticeable was 33 years, probably due to the low average age of the *personnel* of the United States Army and Navy during the late war.

The author points out that the specific treatment for neurosyphilis has been regarded by some as a hopeless therapeutic measure and that remissions occur in untreated cases, presumably because the body is constantly attempting to overcome the destructive work of the spirochæte; however, he worked on the lines that the outcome is unfavourable unless the individuals are aided in the struggle by medical therapy. Solomon, in 1916, published statistics of 50 cases of general paralysis treated systematically for at least two years; 68 *per cent.* had remissions, and 32 *per cent.* were clinically improved. The author has studied these cases and believes that the infective

agent was destroyed in many cases, as the progress of the disease appeared arrested and some are now earning a living. Nevertheless the patients did not become absolutely normal, as nervous physical signs remained and their mentality was dulled.

The method of treatment is a six weeks' course of neosalvarsan intravenously with mercurial inunctions and potassium iodide. Following the intravenous medication spinal drainage is instituted; in addition special attention is given to diet, excretion, exercise and occupation, and the general physical tone is improved by hydro- and electro-therapy. The author considers that no positive statement can be made regarding the eventual outcome without two years' treatment. Of the twelve cases treated for a year or more, four were unimproved, and the others showed various degrees of betterment, physically, mentally, or both; no one can be said to have actually recovered. In some cases the blood or spinal fluid Wassermann was diminished or became negative. Only two patients showed no reduction in the gold curve or cell counts; the latter reacts to treatment more quickly than the former. It requires three months to produce any great change in the gold reaction. Of the remainder of the eighty cases treated the period of time has been too short to draw definite conclusions.

L. H. WOOTTON.

*Remissions in General Paralysis (Clinical and Serological Study)* [*Les Rémissions dans la Paralyse Générale (Étude Clinique et Humorale)*]. *Ann. Med. Psychol., March and April, 1922.*) Targowla, R., Badonnel, Mdle., and Robin, G.

During remissions in general paralysis, grosser signs of dementia and especially memory disorders disappear and the subject obtains partial insight into his previous condition. Physical symptoms, however, remain, and there is persistent weakness of the higher mental functions such as association and synthesis. The cerebrospinal fluid changes become attenuated in regular sequence. Cases least affected by the remission show only diminution of benzoin reaction; next occurs a greater benzoin reduction and diminished albumen; a later stage gives a negative Wassermann (except with special methods), although the blood is usually positive; later, Pandy's reaction is affected, and, last of all, there is reduction of lymphocytosis. Serological and clinical changes do not exactly correspond.

The authors admit the possibility on clinical and serological grounds of a genuine cure, with, in some cases, indefinite residual mental changes; but when the serological reactions are merely attenuated, even with apparent clinical cure, the case is a remission.

Remissions indicate an abatement, more or less lasting, of the pathological process. In "pseudo-remissions," where there is clinical improvement, but no attenuation of fluid changes, the rate of progress of the disease is not abated.

MARJORIE E. FRANKLIN.

*Serological Changes in Neurosyphilitic Patients during a Period of Non-treatment.* (*Arch. of Neurol. and Psychiat., June, 1922.*) Omar, H., and Carroll, P. H.

Specific treatment has been said to modify laboratory findings in paresis. In this observation a selected group of nine paretic