

syphilis as soon as possible after infection. For neuro-syphilis combined treatment (intravenous arsphenamine, grm. 0.2-0.4 in conjunction with intra-gluteal mercury, and iodide by mouth, rectally or intravenously) is usually best, but cases should be considered individually and from all aspects, and auxiliary symptomatic and re-educational methods must not be forgotten. In early or acute cases of neural infection injections are given more frequently than in the later or more chronic, but the dosage should not exceed 0.4 grm. In fully developed cases clinical signs are a better guide than serological changes.

The authors protest against intracranial therapy and all hazardous and painful methods of uncertain benefit. They consider intraspinal treatment of very limited value, physiologically unjustifiable, usually ineffectual, and sometimes harmful. Lumbar puncture is useful for diagnosis and to estimate progress, but should not be too frequent, and should always be followed by rest in bed.

In the discussion which followed this paper several speakers brought forward evidence favourable to careful intraspinal treatment.

MARJORIE E. FRANKLIN.

Therapy in Neurosyphilis, with Particular Reference to Intraspinial Therapy. (Arch. Neur. and Psychiat., January, 1922.) Schaller, W. F., and Mehrtens, H. G.

After discussing the theoretical, pathological and experimental bases for various methods, the writers record their clinical experience at the Leland Stanford Junior University, San Francisco. *Intravenous and intramuscular therapy* was used for (a) 14 cases of tabes, with the result that 85 per cent. improved clinically; serologically 14 per cent. became clear (i. e. cerebro-spinal fluid Wassermann in all dilutions, globulin and cell count all negative), 71 per cent. improved. (b) 11 cases of cerebro-spinal syphilis: 100 per cent. improved clinically; 27 per cent. became serologically clear, and 73 per cent. improved. (c) One case of paresis; not improved clinically or serologically. *Spinal drainage combined with intravenous medication* gave rather better serological results and relieved pressure symptoms, but the method was not persisted with because on the whole, the best results were obtained from *intraspinial therapy*, which gave the following results: (a) 6 cases of tabes with optic atrophy: no clinical improvement; serologically 50 per cent. became clear and 50 per cent. not improved. (b) 11 cases of "arrested" tabes with negative fluid: 27 per cent. clinically improved. (c) 25 other cases of tabes: 80 per cent. improved clinically; 56 per cent. became clear, and 20 per cent. improved serologically. (d) 21 cases of cerebro-spinal syphilis: 100 per cent. improved clinically; 75 per cent. serologically clear, and 9 per cent. improved. (e) 12 cases of paresis: 33 per cent. improved clinically; 25 per cent. became serologically clear, and 25 per cent. improved. Three cases returned to work, clinically and serologically normal, and have remained so to date, viz., 4, 9 and 12 months.

Intraspinial therapy involves disadvantages, although serious complications were not more frequent than with other methods. It

should be reserved for cases resistant to other treatment. Pyrexia seemed to have beneficial effects on the disease. Massive rectal injections of 4 grm. of neo-arsphenamin in cases where intravenous medication was impracticable gave encouraging results.

MARJORIE E. FRANKLIN.

3. Clinical Psychiatry.

The Problem of General Paralysis [Le Problème de la Paralyse Général]. (Gaz. des Hôp., June 24, 1922.) L'hermitte, J., and Cornil, L.

A general survey is here presented in the light of the Bayle centenary conference. Bayle's thesis of 1822, describing and defining general paralysis, is summarised. Early opponents asserted that the condition described was paralysis complicating various psychoses, or, with Baillarger, failing to appreciate remissions, that "paralytic madness" was recoverable and distinct from "paralytic dementia" which Bayle recognised as a later stage. Although Bayle considered the disease a "chronic arachnoiditis," his follower, Parchappe, realised that the basic lesion was cortical. Its syphilitic origin was established by Noguchi, Moore and others. The recognition that "paralytic syndromes" or "pseudo-general paralysis" may occur in many disorders is not incompatible with the conception of the specific disease, "general paralysis of Bayle." Contributory causes such as overwork, alcohol and other intoxications were discussed at the conference, and it was explained that in the east, where mental sufferers often visit temples rather than hospitals, an apparently low incidence may be fallacious.

L'hermitte, reviewing the pathological position, stated that meningitis is now regarded as a subordinate condition which does not determine and may not accord with the cortical changes, while the erosions arising from decortication are merely fortuitous. Histo-pathological examination, which is essential for diagnosis, shows intense general inflammation affecting meninges, vessels, neuroglia and neurons. The vessel sheaths are distended with lymphocytes, plasma-cells, fibroblasts, mast-cells, and occasionally erythrocytes and granular corpuscles. These cells may show hyaline or vacuolar degeneration or altered shapes. Cortical cell bodies disintegrate and atrophy, the changes depending on the intensity and rapidity of the process, and myelinated fibres disappear. Neuroglia proliferation is proportionate to the depth of cortical destruction, and, besides spider-cells, it produces rod-shaped cells in characteristic abundance. Sclerotic plaques, closely resembling those of disseminated sclerosis, have been recently described, and are of great interest in view of the probable spirochætal origin of disseminated sclerosis. In 1920 Herschmann demonstrated foci of necrosis. Bayle's disease is a diffuse process, not necessarily confined to the cerebral cortex. In "focal forms" a relative electivity is shown which determines clinical type, e.g., Parkinsonian, choreiform or cerebellar. Although the lesions are histologically characteristic and of syphilitic type, L'hermitte does not consider them pathognomonic without bacteriological confirmation.