same method of investigation is not stated. By careful provision of vitamins in the diet the disease is considered to be curable in the incipient stage and also even after the appearance of convulsions.

**LEWIS YEALLAND.**

**PROGNOSIS AND TREATMENT.**


The results of treatment by tryparsamide in one hundred and eighty-five cases of neurosyphilis are discussed in this paper. Other forms of antiluetic treatment had previously been employed in the majority of cases, but without much benefit. By means of a combined clinical and full serological examination the cases are divided into the following groups: paresis, atypical paresis, asymptomatic paresis, meningovascular syphilis, tabes and taboparesis. The paretic group contains eighty-four cases, in the majority of which the mental changes were slight.

Tryparsamide was administered intravenously, the quantity used being usually 3 grm. once a week for eight weeks. Two to three courses may be necessary. A similar number of intramuscular injections of mercury salicylate (½ to 1 gr.) were also given. This method of treatment distinctly benefited many of the cases of paresis and meningovascular syphilis, but was less effective in the tabetic and taboparetic cases. Thirty-seven (41 per cent.) of the paretics were stated to be restored mentally, and thirty-eight (42 per cent.) improved. Both in the paretic and meningovascular groups the Wassermann reaction of the blood became negative in just under 50 per cent. The typical Lange curve in the paretics became altered in many instances to a curve similar to that found in meningovascular syphilis.

The occurrence of visual disturbance during treatment by tryparsamide was looked for. Thirteen cases in all developed amblyopia, but of these ten were tabetics and taboparetics. It was found that by withholding the tryparsamide for a month and subsequently recommencing with smaller doses, the amblyopia disappeared, and the full course of treatment could be completed.

The results obtained in the cases of early paresis are certainly encouraging, and the method of treatment is more easy of accomplishment and perhaps less risky than that of malarial inoculation.

**W. G. W.**


The authors present the results of treatment in 195 patients, of whom 183 were neurosyphilitic.

The favourable effect of tryparsamide in neurosyphilis is in paradoxical contrast to the comparatively poor results obtained in early or late syphilis without nervous system involvement. That the drug is not a powerful
spirochaeticidal agent is emphasized by the failure of repeated large doses to heal lesions or to cause the disappearance of surface organisms in ten cases of primary or secondary syphilis, though a single subsequent injection of arsphenamin invariably brought about prompt healing.

The clinical and serological effects in neurosyphilis surpassed those obtained by any other form of treatment. Tryparsamide is of particular value in early general paralysis, in meningovascular syphilis, and in the majority of cases of tabes. Advanced general paralysis is benefited little if at all, while in early neurosyphilis the comparatively feeble spirochaeticidal value of this drug precludes its use unless in combination with an arsphenamin. Visual disturbances occurred in 17.8 per cent. of a series of 241 cases, but in only 2.8 per cent. were the changes permanent.

R. M. S.

[171] Results of administration of tryparsamide in syphilitic disease of the nervous system and in certain other diseases of a non-syphilitic character.—Foster Kennedy and T. K. Davis. Arch. of Neurol. and Psychiat., 1925, xiii, 86.

The authors employed tryparsamide in the Neurological Department of the Bellevue Hospital for the treatment of tabes (thirteen cases), general paralysis (seven cases), meningovascular syphilis (nine cases), taboparesis (one case), mental deficiency with central syphilitic stigmata (one case). In addition, its use was extended to certain other diseases of a non-syphilitic character.

The drug was used in doses of 3 grm. and a series of eight injections was given. The therapeutic results may be summarised as follows:

Tabes.—Six patients were improved as regards root pains, four as regards ataxia. Three were not benefited.

General paralysis.—Two patients showed definite improvement, two slight improvement, and three no change.

Meningovascular syphilis.—Definite benefit was obtained in seven cases; in two no improvement was noted.

Taboparesis.—The only patient in this series received nine injections, and a certain amount of improvement followed.

Multiple sclerosis.—Three patients received a relatively short course of treatment. In two no beneficial change could be noted, and in the remaining case tryparsamide had a deleterious effect, the patient developing a sudden total flaccid paraplegia.

Lethargic encephalitis.—Six cases were treated. In three the cerebral and midbrain signs cleared up, but it was doubtful whether the drug was responsible for the improvement.

An analysis of the effects of tryparsamide on the serological changes showed that the cell count and colloidal gold test were favourably affected, while the Wassermann reaction in both serum and cerebrospinal fluid proved more resistant.

Kennedy and Davis are satisfied that the therapeutic results obtained with this drug compare favourably with other forms of treatment, although they admit the risks of injury to the optic nerves are greater than with other
ABSTRACTS

antisyphilitic remedies. It is doubtful whether neurologists in this country will be impressed with these results, and a drug which has a serious risk of blindness attached to its use is hardly likely to supplant the established antisyphilitic agents.

R. M. S.


The conclusion is reached that tryparsamide definitely affects cases of neurosyphilis, in some instances giving results better than can be obtained by the older methods alone, and in other cases not giving as good results. Its ease of administration without any discomfort to the patient is a point of superiority, but its tendency to produce toxic effects on the optic nerve necessitates great caution in its use. The best results are obtained by its employment in conjunction with other antisyphilitic methods.

R. M. S.


Tryparsamide is a pentavalent arsenical belonging structurally to a chemical group whose members all appear to have an affinity for the optic nerves. Although its spirochaetcidal activity is almost nil, tryparsamide makes possible a successful defence on the part of the organism. It appears to do so by exciting a cellular defence reaction, and it is on this principle that it is used as a therapeutic agent in neurosyphilis.

In rabbits the changes produced by tryparsamide in the retina are not identical with those found in the human being: the former appear to be incapable of resolution; the latter disappear when the drug is discontinued, and, as a rule, do not recur when treatment is resumed.

The authors have studied the effects of tryparsamide treatment on ninety-seven cases of neurosyphilis, the majority of which were examples of tabes or general paralysis. Given intravenously in doses of 1·5 to 4 grm. at about weekly intervals, the drug appeared to be quite inert so far as any general effect on the patient was concerned, but local effects of a somewhat serious nature were observed. In 27 per cent. visual disturbances occurred. These usually consisted of a complaint of dimness of vision, but in two cases with optic nerve or disc involvement complete blindness resulted.

A serological improvement was obtained in 93 per cent. of those with paralysis, and in practically all of the other types of neurosyphilis. In 85 per cent. there was a noted clinical improvement. Of thirteen cases of optic atrophy four became definitely worse, and nine showed either slight improvement or no progress. Tabetic patients showed an almost constant improvement, and all the general paralyses cleared up mentally to some extent, but in only two or three instances was the improvement marked.

The authors conclude that tryparsamide when combined with salvarsan and mercury offers, for the present at least, a more hopeful outlook than any other drug or combination of drugs employed in their service.

R. M. S.
Some interesting observations are given on cases of cerebrospinal syphilis, which had been treated ten years previously by the Swift-Ellis method. Of the original twenty-five cases, several patients could not be traced, seven had died, and nine were living, most of whom were capable of active employment.

The Wassermann reactions of the blood and spinal fluid, which, preceding treatment ten years previously, had been strongly positive, were negative in all nine cases. Cell counts of the spinal fluids, originally ranging from 25 to 327 cells, showed from 0 to 3 cells per cubic millimetre. The colloidal-gold reaction gave a mild response of the luetic type in all the cases examined.

W. G. W.

**Psychopathology.**

**PSYCHOLOGY.**


An attempt is made to show that Rivers’ belief in the failure of the ‘wish-fulfilment’ theory of dreams causes unnecessary confusion. Having quoted the terror dream of a two-and-a-half years old child in which a big dog jumps up at her, the author points out that the leaping of the dog is the prelude to a wish-fulfilment, the actual incident of the jumping dog which was the stimulus for the dream being followed by conspicuous attention from relatives which had hitherto been lacking. In this case the dog appears in the dream in order to satisfy those wishes connected with the petting the child received from her relatives. If sleep had continued the dream would probably have had a happy ending. On this assumption the author bases his main theory that the terror dream is the statement of a condition of wish-fulfilment and not the fulfilment itself. The reason why simple wish-fulfilment dreams are rare in adults is because the things which stand in the way of wish-fulfilment have acquired ‘meaning.’ In the exhibitionistic dream the pleasure which should be felt in association with wish-fulfilment is mixed with the unpleasure connected with unsuccessful instinctive activity, the resulting conflict showing itself as ‘anxiety.’ In referring to post-war dreams an interesting analogy is drawn between ‘going over the top’ or ‘no man’s land,’ and a condition of escape from civilization with its absence of any code of morality. Thus the war-dream would become a condition of wish-fulfilment. ‘No man’s land’ would obviate the difficulties of peace conditions. In stating that wish-fulfilment seems to be the whole purpose of the war-dream, Green appears to disagree with Freud’s latest theory that such dreams obey the repetition-compulsion.

ROBERT M. RIGGALL.