PROGNOSIS AND TREATMENT.


Bulbocapnine is one of the alkaloids obtained from the plant Corydalis cava. Chemically, it is closely related to apomorphine. In warm-blooded animals its injection produces a state resembling catalepsy, both voluntary and reflex movements being suppressed. This discovery suggested a possible sphere of clinical usefulness in regard to diseases characterized by involuntary movements. The author gives bulbocapnine hydrochloride (maximum dose 200 mgm.) intramuscularly or by the mouth.

Four cases of paralysis agitans were studied, also one of cerebellar and one of idiopathic tremor. Kymographic tracings show that in all cases bulbocapnine lowered the height of the tremor, as compared with the effect of control injections of physiological salt solution. Its effect seems to be independent of the source of the tremor.

The influence of the alkaloid over the tremor, however, is transient, not lasting longer than some hours.

S. A. K. W.


In continuation of work with the alkaloid bulbocapnin the authors here record further data which are of practical value. In seven cases of paralysis agitans they compared the effect of scopolamin and bulbocapnin respectively; the former produces its effect in half an hour after injection, the latter after ten minutes. Scopolamin was of greater effect in four cases, in one of which the other drug proved useless; in two bulbocapnin was the more efficacious, and in one the two produced practically identical results. On the other hand, bulbocapnin is preferable to scopolamin in the sense that it is of more constant dependability when given over a long period, it has no ill effects, and its withdrawal is harmless.

Apart from its usefulness in cases of tremor, variable though the authors admit this to be, they have found that it reduces pathologically increased deep reflexes, e.g., the ankle clonus of pyramidal cases. It appears to reduce normal muscle tone, but an effect on increased tone from disease is not proven.

S. A. K. W.

[74] Absent ankle jerks as the result of treatment with neo-arsenical compounds (L'aréflexie achilléene des traitements novarsenicaux).—J. A. Sicard. Revue neurol., 1925, xli, 586.

A warning against the continuation of treatment in cases of syphilis in which the ankle jerks are lost during arsenical medication. The sign is apt to be mistaken for early evidence of tabes. If at this stage treatment is pushed, jaundice or exfoliative dermatitis may occur.
Loss of the reflexes is due to a peripheral neuritis, but is often the only sign. It may be distinguished from tabes by the absence of associated signs, normal cerebrospinal fluid, and quantitative alterations in the electrical reactions.

The author has found that patients receiving a course of 8 gm. in two months are apt to lose their ankle jerks. A course of 5 or 6 gm. in two or three months appears to be safe.

In cases of neurosyphilis when the ankle jerks are absent at the commencement of treatment, the diagnosis of arsenical neuritis is difficult, but symptoms such as paraesthesia suggestive of peripheral neuritis should be the signal for discontinuing arsenical treatment in favour of mercury or bismuth.

C. P. S.


Bostroem contributes an analysis from the point of view of treatment and prognosis of seventy-two cases of cerebral tumour that have been encountered during a period of three years. The diagnosis was verified by operation or autopsy in forty cases. In twenty-seven of these adequate clinical localization was possible and was found to be correct; in three other cases a suggested localization turned out correct; in nine cases no localization was possible. Of the seventy-two cases forty-six were operated on, and the remaining twenty-six for various reasons were not treated. The operated cases are divided evenly into two groups, removal of the tumour having been attempted in half of them and nothing more than decompression in the remainder. In the former group (twenty-three cases) there were seventeen deaths; of the six patients who survived, three had been found to have cerebral cysts, and the operation resulted in a cure in one case, in a cure with some resulting paralysis in another, and in no change in the third; in one case of true tumour the result was a cure with residual paralysis, in the other two cases there was no change. Among the twenty-three cases in which decompression only was attempted there were three which seemed to be cured (? pseudo-tumours), and four which were improved; there were eleven deaths. Of the patients that were not operated on (twenty-six cases) sixteen have died, seven have shown no change, and three have been lost sight of.

As far as could be discovered from the histories, headache was the first symptom in only 50 per cent. of cases, fits in 13 per cent., gradual loss of vision in 8 per cent., paralysis of the face or limbs in 6 per cent.

The author urges that practitioners should not wait until they can make a diagnosis of cerebral tumour, but should send all suspected cases to a clinic for investigation. In much earlier diagnosis and operation he sees the only hope of decreasing the mortality.

J. P. M.

[76] Radiotherapy without operation in tumours of the spinal cord (Sur la radiotherapie des tumeurs non operées de la moelle).—E. Flatau. Rev. neurol., 1925, xli, 311.

The author has already published observations upon radiotherapy in cases of tumour compressing the cord after a preliminary laminectomy. Compara-
tively few cases are on record in which irradiation alone has been tried. The published results are, on the whole, not encouraging. Of the author’s cases which are fully reported, the first was one of gradual compression in the mid-dorsal region in a woman of forty-eight. The symptoms had progressed to an almost complete spastic paraplegia, with corresponding sensory loss and bedsores. Sphincter control was preserved. Lipiodol was arrested at the upper border of the seventh thoracic vertebra. There were no signs of vertebral or mediastinal disease. The Wassermann reaction was negative in blood and spinal fluid. Six series of irradiations were given in the course of nine months. Clinical improvement set in a week after the first series and continued until, at the conclusion of treatment, the patient was able to walk with support. The sensory loss was diminished. The bedsores healed. X-ray pictures taken during the course of the treatment showed that the lipiodol gradually found its way past the obstruction to the bottom of the thecal sac.

The second case was that of a man aged forty-two, with an almost complete loss of power and sensation below the level of the umbilicus, bedsores and retention of urine. The x-ray plate revealed a tumour of the mediastinum. The vertebral column appeared intact. The diagnosis was made of a lymphosarcoma, presumably compressing the cord by way of the inter-vertebral foramina. As the result of irradiations carried out over a period of a year, the patient was able to walk with the aid of sticks: sensation was normal, sphincter control imperfect, but much improved. The x-ray picture of the mediastinum was normal, the tumour shadow having disappeared.

C. P. S.


In 1922 Högler published an account of his success with epidural injections of antipyrin in sciatica, and since then the author of the present paper has used the same treatment in twelve cases and is well satisfied with the results. The amount of antipyrin used for the injection is 10 c.c. of a 40 per cent. solution and the injection is made through the inconisura sacralis as for sacral anaesthesia. The author uses the knee-elbow position; the injection usually causes little pain, but to soothe the patient (and also because even in practised hands pain cannot always be avoided) he gives a dose of morphia half an hour before the operation and uses a local anaesthetic. The resistance offered by the tissues to the infusion of the fluid is very variable, and while in most cases 10 c.c. can be injected easily, there are cases in which increased resistance, accompanied by severe pain, is met with after the injection of about 5 c.c.; in such cases, if the injection be continued up to 8–10 c.c., the pain ceases when it is completed. Jordan thinks that the difficulties are more frequent in men, probably for anatomical reasons. After the injection the patient must lie on his back for several hours; complete freedom from pain soon follows, and the patient can walk home the same day. No ill effects have been seen. Sometimes there is a return of pain a day or two after the injection,
but it does not last beyond the third day. Two cases were regarded as failures.

The method is most suitable for cases of root sciatica, but Jordan has found it almost equally efficacious in sciatica of the nerve-trunk, though in the latter some pain in the calf is liable to remain. This may be treated by novocain injection of the nerve-trunk.

J. P. M.

Endocrinology.

[78] The thyroid gland in bodily and mental disease.—SIR FREDERICK MOTT. Jour. of Ment. Sci., 1924, lxx, 519.

Examination of the nervous system of fatal cases of myxedema reveals the presence of chromatolysis of certain ganglion cells. There is no constant relationship between the weight of the thyroid and the body weight. Conceivably the bodily disease may influence the weight of the thyroid. Deficiency of iodine in the thyroid may be due either to excessive consumption or to deficient production. The intervesicular epithelium is the important factor in the secretion of iodine. Introduction of iodine into the diet diminishes the incidence of epidemic goitre.

The ovaries, testes, adrenal medulla and pituitary show pathological changes in mental disease, but no such changes are noticed in the thyroid. In death from chronic debilitating diseases the iodine content of the thyroid is found to be very low. An interesting fact is that in cirrhosis of the liver it is found to be relatively high. A good thyroid, according to Rollier, is of good prognostic significance. Iodine plays an important part in the metabolism of the body.

Chemical analysis of the thyroid glands from various sources brings out the fact that the iodine content is relatively low in cases suffering from mental disease (excluding general paralysis), viz., 0.066 per cent. as compared with 0.158 per cent. in tubercular patients, 0.124 per cent. in cases from a general hospital, and 0.136 per cent. in cases of general paralysis.

In myxedema, in addition to the atrophy of the thyroid, there is hypertrophy of the pars intermedia of the pituitary, the part that secretes colloid into the cerebrospinal fluid. This may explain the changes in the nervous system mentioned above.

The cortex adrenalis contains in its cells a lipoid cholesterine ester which is essential to body metabolism. In sepsis the cholesterine ester disappears from the cells. Seventy-five per cent. of deaths in asylums are from infective processes, and in the majority of these cases the cholesterine ester has disappeared from the cells of the cortex adrenalis. When well-developed sexual organs exist there is usually a well-developed cortex adrenalis.

D. M.


A case of a male, aged fifty-five years, who presented some evidence of Fröhlich's syndrome in sexual and skin changes, together with signs of