stomach was performed in 1918. He remained well till 1926 when he complained of paraesthesiae. His blood count was typical of a primary anaemia. In 1928 he died of bronchopneumonia, and at postmortem findings consistent with the diagnosis of pernicious anaemia were found. The spinal cord showed degeneration in the central areas of the posterior columns. This is therefore a record of a case of subacute combined degeneration of the spinal cord in a patient who had his stomach removed eight years previously. E. A. C.


The author asserts from clinical observation that inversion of the abdominal reflexes may occur independently of paresis of the muscles on the side stimulated; that in spinal compression a genuine crossed abdominal reflex can be obtained: and that these inversions are usually missed because in the first place strong excitation is necessary, and, in the second, because a latent period may exist.

His theory is, apparently, that in spinal compression pyramidal function is interrupted, whence the loss of the ordinary abdominal reflexes. But if sensory conduction is not completely blocked, then the stimulus can make use of a non-pyramidal motor system. J. V.

PROGNOSIS AND TREATMENT.


This article is worthy of attention as it raises questions regarding the advisability of placing epileptic children upon a prolonged and rigorous ketogenic diet. Unfortunately the experiment has not been carried out over any prolonged period of time. The author found that on a ketogenic diet the output of calcium and phosphorus exceeded the intake; she also found that there was a major shift of the excretion from the faces to the urine. During the period of the experiment the calcium and phosphorus levels in the blood were within normal limits. It, therefore, appears that on such a diet children must call upon their stores of calcium and phosphorus, a state of affairs which may result in damage to the central nervous system or bones. E. A. C.


Patients with moderately severe epilepsy were placed on a high ketogenic diet until seizures were prevented; conditions were then modified in various
ways in an attempt to produce attacks. Administration of carbohydrate to one patient and carbohydrate and insulin to another caused recurrence of seizures. In another case a mild dietary alkalosis suddenly replaced by an uncompensated alkalosis, resulting from administration of sodium bicarbonate, was followed by a seizure. On the other hand the production of marked alkalosis failed to produce an attack in subjects with infrequent attacks. In a fairly well controlled case with frequent convulsions, the attacks were reduced in number to the greatest extent when the patient was fasting or on a ketogenic diet having an acid ash; and in this case during the periods of convulsions the venous blood Ph was found to shift towards the alkaline side of the normal range.

From the results of these experiments the conclusion may be drawn that the abnormality in the acid-base equilibrium is not the fundamental factor in the production of epilepsy, but the expression of some deeper disturbance. E. A. C.


The author records the results after the administration of harmin in three cases of Parkinsonism following encephalitis. He found that there was some slight improvement in the power of sustaining repeated fine movement and in the rapidity of spontaneous voluntary movements but that no effect was observed upon tremor and salivation. No ill effects were produced with a dose of 0.02 g twice daily; higher doses were not given. Better results were obtained by combining the two drugs harmin and scopolamine; from his records, however, most effect appears to have resulted from the scopolamine. E. A. C.


The experiences described here were obtained in an institution for young cases, not bed-ridden, and judged capable of some improvement or at least arrest of further developments; 79 male and 26 female cases were treated, including a few adults, falling into the two main groups, those with character changes and those with the amyostatic syndrome; a fair number suffered from a combination of these.

Therapeutic efforts were both medical treatment and remedial education, both being required for satisfactory results. Drugs and injections for foreign
proteins, arsenic preparations and inoculations with malaria have all been tried; no ill-effects were found, but with all sorts of drugs transient improvement was soon followed by relapse into the former state. As a rule atropine and scopolamine have remained the only useful ones, given for five-day periods with intervals of two days. Luminal proved useful in oculogyric spasms, and attacks of hyperpncea seemed lessened by giving adrenalin by the mouth. Epileptic attacks were quite rare.

Physical exercise, drill, gymnastics, and rhythmical movements were found invaluable, helping to overcome inhibition of movement and in developing a sense of order and discipline; they are best done in groups, individuals being stimulated to effort by rivalry with others; musical accompaniment for these was most helpful.

Massage in severe Parkinson cases did best if rapidly passing from passive to active massage, reinforcing the patient's will and energy by making him co-operate.

All these physical methods of treatment are useless unless combined with re-education; intelligence is seldom much affected and continues to develop in most cases, though those attacked before the age of five years made little and slow progress, the intelligence quotient decreasing with time. Curative education must be done by teachers with special training, understanding the special difficulties of the children; manual training plays an important part. The general influence of the environment has a marked psychological effect, and premature discharge home usually leads to an increase of symptoms. The author considers that the experience gained in this institution makes it highly desirable that similar institutions should be provided to deal adequately with all cases, since the combination of treatment thus available promises a degree of improvement or at worst arrest of the process of deterioration, which is unlikely to be gained otherwise while keeping the patients at home, and gives them the best chance of making a tolerable adjustment to their disorders.

M. R. B.


Twenty-three cases are described which have benefited by this form of treatment. The author considers that datura stramonium in the form of dry leaves is the most valuable palliative remedy in Parkinsonian states. It may be prescribed in daily total doses as high as one or two g, but administered in small doses every one or two hours. Almost all the symptoms are improved simultaneously.

Cases which do not improve at all or improve slightly are those of old subjects with pronounced arteriosclerotic conditions and very severe tremor.

R. G. G.

Dr. Frazier's authoritative paper on trigeminal neuralgia and its treatment should be read by all neurologists, seeing that it embodies the experiences of nearly thirty years.

The etiology of the condition remains unexplained. It is spontaneous in origin and continues uninterrupted throughout the patient's life unless therapeutically arrested. No instance of spontaneous cessation is on record. The trigeminal nerve is a nerve of perception for pain, touch, and temperature, and from numerous observations made after section of the sensory root Dr. Frazier sees no reason to qualify this statement. There is no evidence that any form of sensation is in any way influenced after excision of the superior cervical ganglion with or without stripping of the periarterial plexus of the common carotid. As for the question of pressure sense (face) and the facial nerve, the author finds proof of this association as follows: when the sensory root is cut there is no difference in the appreciation of deep pressure on the two sides of the face; when the face is paralysed on one side as well as insensitive from section of the sensory root, there is gross diminution in the appreciation of deep pressure.

A careful anatomical description is given of the three separate and distinct bundles in the sensory root, corresponding to ophthalmic, maxillary, and mandibular divisions; and also of the two usual patterns of the middle fossa, corresponding to the brachycephalic and the dolichocephalic skull respectively. Details are given of operative procedure, and stress is laid on the importance of conserving the part of the sensory root corresponding to the superior division. The principle of subtotal section is now carried so far that only that portion of the root is divided which conveys the afferent impulses from the pain area. If pain is controlled or arrested in the zone in which the paroxysm is initiated, this suffices.

S. A. K. W


Thirty-one children between the ages of two and twelve years have been treated by intramuscular injections of potassium bismuth tartrate with butyn. No serious toxic effects were encountered, though a bismuth line on the gums was frequently seen in children with carious teeth. In a few instances a transitory albuminuria was found but no frank nephritis has occurred. The effect of bismuth on children with acute interstitial keratitis seems to have been favourable. Those with syphilis of the central nervous system have shown clinical as well as serological improvement. Most value has been found in the use of bismuth in those who had no tolerance for arsenic.

E. A. C.