ABSTRACTS FROM CURRENT MEDICAL LITERATURE.

NERVOUS DISEASES AND INSANITY.

By Dr. R. S. STEWART.

Suprarenal Extract in the Treatment of Mental Diseases. Dawson (The Journal of Mental Science, October, 1901).—From his experience of the use of this drug, this writer draws the following conclusions:—The chief physiological action of extracts of the suprarenal gland is increase of arterial pressure, but they also produce a tonic effect upon the heart and on muscle generally, and, possibly, some diminution of metabolism. Owing to the transitory nature of the effects produced by intravenous injection of the extract, suprarenal must be given by the mouth if any prolonged action is to be obtained. Both for à priori reasons and as a matter of experience, it appears to be indicated in conditions of excitement and exaltation, in which state the blood-pressure is usually found to be lowered. Administration for a certain length of time will probably be found necessary in most cases in order to produce any marked effect, at least, where excitement is violent. Although the state of the blood-pressure, as a rule, forms a convenient indication for its use, high pressure does not absolutely contraindicate it if there is some reason to think that it is not associated with the mental state, as an abnormally high pressure may still be lower than the average of an individual case. Suprarenal extract seems unlikely to be of benefit in cases of melancholia, and where there is much stupor. It, therefore, seems probable on the whole that the form of insanity in which it will be found most useful is acute mania of fairly recent origin uncomplicated by stupor.

The Physiological Effects of Rachicocainisation. Pitres and Abadie (Archives de Neurologie, October, 1901).—In an extensive research into this method of treatment, the following phenomena were observed by these writers. They insist that the analgesia consequent to the lumbar subarachnoid injection of cocain is not due, as has been asserted, to the direct action of the drug upon the cord, and to a functional modification consequent to this last, but to an alteration of the conductivity of the sensory roots. The analgesia is installed progressively, and not all at once. There is at first a slight hypoalgesia, which increases gradually, and finally merges into analgesia. In the same way, when the sensibility reappears, complete analgesia succeeds hypoalgesia, which becomes gradually less up to the complete return of sensibility. Cutaneous sensibility to pain is the first to disappear; sensibility to temperature is the next to be abolished; then sensibility to pressure is lost, and the last to disappear is sensibility to contact. The sensation of tickling of the soles is perceived for a long time, but it produces no reflex movements, and, during the invading hypoalgesia, there is manifest error of localisation. In four instances, electric sensibility—previously normal—was abolished, and deep sensibility was abolished in proportion to the degree of cutaneous analgesia. The notion of the position of the limbs is in general preserved, and the deep visceral sensibilities appear never to be obliterated.

Abolition of the cutaneous reflexes is the rule in all the analgesic regions, and the order of this abolition follows exactly the invasion of the analgesic zones. Except in cases of tabes, the tendon reflexes are always modified. If normal, they become exaggerated during the action of the cocain. This exaggeration is progressive, sometime preceded by a short period of diminution, and attains its maximum at the moment of greatest extension of the analgesia;
it diminishes gradually until the reflexes take on their former normal characters. If, on the contrary, the reflexes are exaggerated before the action of the cocaine, there is observed a progressive diminution, which may even go as far as complete abolition. Lastly, if the reflexes are feeble, they gradually diminish, and are sometimes abolished.

With moderate doses of the drug no sphincter troubles were noted, and in six out of seventeen of the cases, repeated transitory erections were observed.

In one-third of the cases, there occurred epileptoid trepidation; independently of this, and only in hysterical subjects, trembling of the lower limbs, sometimes extending to the upper extremities, and even to the whole body; and the patients complained of heaviness of the limbs and inability to move them, though resistance to passive movement remained unaffected. The maintenance of the upright posture was always possible, and no motor incoordination was noted.

In the vaso-motor domain no striking phenomena were observed, except that the application of mustard produced no tumefaction, but in a very large number of cases there was abundant sweating, affecting almost exclusively the upper part of the trunk.

**Rachicocainisation—Fatal Results. Legueu** (Le Progrès Medical, 16th November, 1901).—The first case is that of a man who was the subject of emphysema, heart disease, and atheroma, and who was about to undergo operation for ruptured triceps tendon. Ten minutes after the injection of 0·02 grammes of cocaine into the lumbar arachnoid, the patient presented signs of agitation, there were some convulsive movements, and death occurred almost instantaneously.

The second was a case of strangulated hernia, with very grave general condition. Six minutes after the injection, the patient presented signs of anxiety, with cold sweats, dilatation of the pupil, and vomiting, and in six minutes more was dead. The autopsy revealed arrest of the heart in systole, some pulmonary infarcts, nothing in the nervous system, and only trifling lesions in the kidneys, and death was considered to be due to bulbar syncope.

**Rachicocainisation. Villar** (Le Progrès Medical, 23rd November, 1901).—On two occasions in a first series of thirty-six injections—the operation of laparotomy—the analgesia was incomplete; in all the others it was perfect. The regions operated upon were the abdomen, the lower limbs, the genital organs, and the anus. No serious accident occurred. The analgesia ascended generally as high as the costal border; sometimes it reached as high as the neck and arms. In a second series of forty cases, there was likewise no accident. Lumbar cocainisation is not, says this writer, a method of choice, but it has no gravity, and it presents certain advantages, the non-necessity of an assistant, indications in patients affected with thoracic diseases, the possibility of the patient’s assistance in certain circumstances, absence of shock.

**Lumbar Puncture and Fractures of the Skull. Poirier** (Le Progrès Medical, 14th December, 1901).—This is a case in which the fracture was unrecognised, and the symptoms were attributed to menigitis. Lumbar puncture gave exit to about 35 grammes of a deeply blood-tinted fluid issuing in a powerful jet, followed by immediate and considerable amelioration in the condition of the patient. Some days after, the symptoms of the fracture became apparent, and, eleven days after, the patient left the hospital recovered.

**Generalised Sarcoma of the Spinal Pia Mater Simulating Tubercular Meningitis. Lereboullet** (Le Progrès Medical, 4th January, 1902).—A child, 4 years old, had a polypus removed from the ear. The growth recurred, and at the same time secondary sarcomatous growths appeared in the cervical ganglia. Then symptoms pointing to tubercular meningitis supervened, headache, vomiting, retraction of the abdomen, rigidity of the neck,
irregularity of the pulse. The possibility of error was avoided by the indications afforded by lumbar puncture. There were neither lymphocytes, nor lowering of the cryoscopic point, nor permeability to iodine. Death occurred fifteen days after the appearance of the symptoms of meningitis, and two and a half months after the occurrence of the auricular symptoms, and the autopsy revealed the existence of a sarcomatous growth starting from the left auditory nerve, invading several of the cranial nerves, and extending throughout the whole length of the spinal pia mater.

MEDICINE.

BY WALTER K. HUNTER, M.D., D.Sc.

Pulmonary Incompetence in Mitral Stenosis.—The following case was reported by Dr. Brockbank in The Medical Chronicle for October, 1901:—

The patient, a female, aged 19, was admitted to hospital with shortness of breath and palpitation. These symptoms had set in three years before, but up till that time the patient had enjoyed good health. There was no history of rheumatism, chorea, or scarlet fever. On auscultation over the precordial area a presystolic murmur with accentuated double second sound was heard at the apex. In the tricuspid area a faint systolic murmur was heard. The sounds at the aortic cartilage, though accentuated, were pure. In the pulmonic area (third left interspace, three-quarters of an inch from left border of sternum) the sounds were also accentuated; but there was, in addition, a distinct diastolic murmur at the end of the double second sound. This murmur was strictly localised to the pulmonary area.

The whole subject of pulmonary incompetence in mitral stenosis is shortly discussed by the same author in an abstract in the September number of The Medical Chronicle. Sixteen other cases are there referred to, and we are told that in nine of these the diagnosis was confirmed by a post-mortem examination. It is pointed out how frequently we find degenerative changes in the walls of the pulmonary artery in cases of mitral stenosis, due, doubtless, to the long-continued high tension in the pulmonary circulation in that disease. As a result of these changes the pulmonary artery and its orifice become dilated, and so we have the regurgitant murmur as above recorded.

A Case of Acute Leukæmia. By Dr. J. F. Wilkinson (Intercolonial Medical Journal of Australasia, August, 1901).—The patient was a girl, aged 16 years. Her illness set in with pain in the left side, which, however, at first was not sufficiently severe to confine her to bed. A few days later the pain increased in severity, spread to the epigastric region, and she now seemed to be pretty ill. She was first seen by Dr. Wilkinson a fortnight after the onset of the above symptoms. She was then pale, anemic, and anxious-looking. The abdomen was distended and very rigid, especially above the level of the umbilicus. The liver was enlarged down to a level with the umbilicus, and the spleen reached to the iliac crest. The glands in the submaxillary region, in the neck, axillæ, and groins were enlarged and hard, but not matted together. There was a patch of pneumonia at the base of the left lung; the heart sounds were pure, and the urine free from albumen. Examination of the blood showed great increase in number of the white blood corpuscles, there being 110,000 per cemm. These were mostly lymphocytes, and there were but few polynuclear and no eosinophile leucoocytes. There was but little diminution in the number of red corpuscles; a few normoblasts were to be seen. For the next week (third week of illness) the patient remained fairly well, and took milk freely. But petechiae had appeared on