PARALYSIS AGITANS AND POST-ENCEPHALITIC CONDITIONS.

PROFESSOR CRUCHET'S LECTURE.

UNDER the auspices of the University of London, at the Royal Society of Medicine, on February 25th, with Sir James Purves-Stewart in the chair, Professor RENÉ CRUCHET of the University of Bordeaux gave a lecture on the relation of paralysis agitans to the Parkinsonian syndrome of epidemic encephalitis.

Sir JAMES PURVES-STEWART referred to the closer and more appreciative understanding between English and French physicians which had grown up since the war. It would be interesting, he said, to listen to a lecture by such a distinguished French physician on a malady such as Parkinson's disease, which was so essentially English.

Professor CRUCHET began by explaining how in 1917, when he described what he believed to be a new disease under the name of "subacute encephalo-myelitis," which later became "encephalitis lethargica," he observed in several cases that an immobile face existed from the onset of the disease, and that this Parkinsonian appearance was, however, quite different from Parkinson's disease. Later, with the opportunities afforded by the epidemic of 1919-20, these Parkinsonian symptoms of encephalitis lethargica became much more common, but they were still to be differentiated from true paralysis agitans. Confusion between these two diseases, however, was very evident owing to the fact that they had certain symptoms in common. Such symptoms had been isolated by Professor Cruchet under the term "bradykinetic syndrome."

The Bradykinetic Syndrome.

This syndrome, he said, consists essentially of slowness of movement; this is associated with immobility, fixed attitude, kinesia paradoxa, and, according to some writers, muscular resistance. The immobility is most strikingly shown in the expression of the face—the so-called "Parkinsonian mask," not, however, described by Parkinson. This immobility is also shown by the absence of many other characteristic little movements which constitute individuality. The fixed attitude generally consists of a bending forward of the body with a neck shrunk between the shoulders and arms slightly flexed with the hands brought towards the abdomen. Slowness of movements is especially striking on the face: emotional expressions lack spontaneity. Even the movements which have become automatic by habit become stiff and slackened. This slowness is strikingly shown in certain occupations where patients take four or five times the usual number of hours to do a piece of work. This slowness of movement is quite different from that seen in people who are slow from birth or by temperament, in that it is stiff and lacks spontaneity. The movements are, however, perfectly co-ordinated. The more a certain act goes on or is repeated the slower it becomes until it finally stops. Paradoxical kinesia, as described by Souques in 1921, is shown by certain patients who, only able to walk slowly and with difficulty, sometimes find themselves able to run for a brief period of time. This sign, occurring in paralysis agitans, was recognized by Parkinson. With regard to muscular resistance, Professor Cruchet thought that the rigid appearance of patients with the bradykinetic syndrome had given rise to a preconceived idea of muscular resistance, and even of hypertonus. This he believed was by no means essential to this syndrome, and except in a few advanced cases of paralysis agitans he had never found true rigidity occur. The bradykinetic syndrome was common to a certain number of morbid states and, in addition to the two diseases here discussed, could be found in progressive lenticular degeneration, in disseminated sclerosis and pseudo-sclerosis, dementia præcox, and it might even become spasmodic, as described by Professor Cruchet in 1906, in certain forms of spasmodic torticollis. In Parkinson's disease, he said, the bradykinetic syndrome is present, but strangely enough Parkinson did not mention the peculiar immobility of the face which occurs, perhaps because it was such an obvious phenomenon. Parkinson was more concerned with the difference of his disease from ordinary paralysis, where the onset is sudden, and with two striking features—namely, the shaking and the bending forward of the trunk. The latter has been shown to be characteristic of the bradykinetic syndrome. Parkinson's description of the patients who were "irresistibly impelled to take much quicker and shorter steps, and thereby to adopt unwillingly a running pace," was that of kinesia paradoxa. The tremor particularly attracted the attention of Parkinson; it appears very early in the disease and is often very violent in the later stages. Subsequent writers added the description of "pill-rolling" to some of these movements. Parkinsonian bradykinesia is therefore characterized by its insidious onset at an advanced age, its progressive evolution, its irritable mental state, and the peculiar shaking which exists at rest and disappears in voluntary action.

Post-encephalitic Bradykinesia.

The bradykinesia of the post-encephalitic state (Professor Cruchet continued) is quite complete, although the fixed attitudes adopted are more complex and varied in nature than in Parkinson's disease. Slowness of movement has been carefully studied; it is shown in a very interesting manner if the patient reads aloud. Sudden stops occur at the end of the lines, and later between words and even in the middle of words, until stops become more and more frequent, the voice becomes imperceptible, and a total cessation of reading occurs. Similar stoppages occur in the habitual movements of eating, dressing, brushing the hair, etc. Paradoxical kinesia is strikingly shown in the post-encephalitic state. Patients quite immobile and infirm will rise from the chair in his (Professor Cruchet's) consulting room and begin to dance! Other patients are able to do gymnastic exercises and throw quoits in a skilful manner. Similar occurrences have been described by Arthur J. Hall, who recorded the case of a man who drove a lorry from Sheffield to London and back, and by G. L. Thornton. As indicated previously, no true rigidity exists, as these paradoxical movements prove. In addition to the bradykinetic syndrome certain other symptoms occur which enable post-encephalitic conditions to be marked off from paralysis agitans. Tremor is rare, and in only three cases out of a series of a hundred was it of the true Parkinsonian variety. In other cases it did not occur at rest, but only periodically in certain positions of the limbs, sometimes increasing in intensity as a result of violent exertion. Tremor, when it does occur, does not become progressively worse. The mental state of the post-encephalitic patient is calm and peaceful, although he may be afraid of the slightest movement and prefer to remain in bed. The intellectual state is often slackened, but ideas are clear, judgement intact, memory conserved, and reasoning lucid. This has been called bradypsychia or bradypraxis by Verger and Hesnard. As a result of this "slowness of intellect" patients seem to have taken on a new personality. The onset of post-encephalitic bradykinesia is usually definite, and not vague as in paralysis agitans. Somnolence, diplopia, infectious symptoms like those of influenza, and toxic symptoms are often definite. The knowledge of the epidemic nature of the disease is also important. The age of the patient is important: in paralysis agitans the average age is about 60, while post-encephalitic conditions are commoner in young people, and children are frequently attacked. The course of the two diseases is different: post-encephalitic conditions can get better and even be cured, especially in the early forms. Late forms appearing between six months and two years after the initial attack have a less favourable prognosis, although cases have recovered from advanced phases of the disease. Other differential signs include salivation, early in encephalitis and late in Parkinson's disease, while pupil changes, exaggeration of the knee- and ankle-jerks (without Babinski's sign), and various changes in the cerebro-spinal fluid, especially an increase in Fehling-reducing substances, are all characteristic of post-encephalitic conditions. Curious torsion spasms occur also in these conditions, patients sometimes twisting themselves into incredible attitudes; these are analogous to the torsion spasms described by various authors in 1910 and 1911, and of the same clinical family as Wilson's disease. Professor Cruchet considers the curious spasmodic torticollis cases described by him in 1906 to be of the same nature.

These cases show athetotic and choreiform movements at rest, slowness of all the voluntary acts, a fixed attitude, and certain vasomotor disturbances. Epidemic encephalitis has greatly increased the number of these bradykinetic forms, and their spasmodic nature seems to be a secondary phenomenon. Such associated forms have greatly complicated the already diverse picture presented by encephalitis lethargica. Professor Cruchet concluded by indicating that since the action of the virus of encephalitis in the nervous system is very diffuse, certain cases of the true Parkinsonian type did occur; but this was rare, and from clinical observation it was possible, in the majority of cases, to distinguish between the two diseases. Although the anatomical findings were interesting, the clinical distinction was the more important one for the physician.

At the close of the lecture numerous slides were shown: these consisted of photographs of patients and microphotographs of sections of brain. Various microscopic slides were also exhibited.

Scotland.

ROYAL MENTAL HOSPITAL, MORNINGSIDE, EDINBURGH.

PROFESSOR ROBERTSON'S ANNUAL REPORT.

THE one hundred and twelfth annual report of the Royal Mental Hospital, Edinburgh, for the year 1924 was presented by Professor George M. Robertson, physician-superintendent of the institution, at the annual meeting in the City Chambers, Edinburgh, on February 23rd, when the Lord Provost, Sir William Sleigh, was in the chair. It was reported that 212 patients had been admitted during 1924; including 804 on the register at January 1st, 1924, the total number of cases treated during the year was 1,016. The patients discharged recovered numbered 48 and those unrecovered 84. The number of patients who died was 55, yielding the lowest death rate yet recorded in the history of the institution. With regard to causation, there appeared to be a falling off in cases due to alcoholic excess; only 5 were definitely diagnosed as cases of alcoholic insanity, while the amount of insanity attributable in part to alcoholic excess was 7 per cent. for men and 0.8 per cent. for women, or a total of 3.3 per cent. for both sexes. This showed a marked diminution as compared with the corresponding figures for the seven years before the war, which were respectively 16.4 per cent., 9 per cent., and 12.6 per cent. Influenza seemed to be reappearing as a cause, 6 cases having been attributed to this disease.

Mental Nursing Homes.

Professor Robertson recalled that when the Royal Hospital at Morningside was opened in 1813 it admitted private patients only, and that it now again relied for its prosperity on the admission of this type of patient. Since Craighouse was added to the institution thirty years ago there had been an ever-growing need for expansion. The public had become more and more averse to sending persons suffering from recoverable or mild attacks of mental disorder into mental hospitals, and the managers had given careful thought to the particular form which any new accommodation should take. Seven years ago they decided to establish, quite detached from the mental hospital, nursing homes in which patients suffering from the early stages and curable forms of mental disorder might receive suitable treatment in the expectation that they might recover without being certified or entering a mental hospital. The scheme, initiated in a small way seven years ago, was now fully established. During the whole of last year four fully equipped nursing homes, accommodating about fifty patients, had been in successful operation in the suburbs of Edinburgh, and then a mansion-house in the country for convalescent patients, which accommodated a dozen or more. Recently the managers had purchased Vogrie House, together with 250 acres of land, some distance outside Edinburgh, and in this large building they contemplated further developments of the scheme. In these homes the family physician could treat his own patients exactly as he did in nursing homes for other diseases. The managers merely provided the appropriately equipped home and the necessary staff under the direction of an experienced matron. In this way early and mild cases of nervous breakdown could receive appropriate nursing and care. These homes were also useful for patients suffering from the mental breakdown that often accompanied old age; such cases were frequently very difficult to care for at home, yet no one liked to send an aged parent or relative in this condition to a mental hospital. The number of patients admitted into these homes during the year 1924 was 111, and the total number treated in them was 145. Professor Robertson mentioned that two matters connected with such homes should not be lost sight of. One was that such homes should start under disinterested management and only under the aegis of bodies who had already had some experience of the provision needed; the other was that such homes must be under the supervision of the department which keeps under observation places for the treatment of patients in an analogous condition—namely, the General Board of Control. Unless this were done he felt that scandals might arise from the adoption of inefficient methods and from the possibility of injustice to certain patients. The necessary supervision need not be obtrusive to be efficient.

Voluntary Admission to Mental Hospitals.

The subject of voluntary admission had developed during the last ten years, but mainly during the last five, and it had indeed grown in Scotland into such favour and to such proportions as to amount to a revolution in the practice with regard to mental diseases. The change was initiated by a simple alteration of the existing procedure introduced into the Act of 1913. Previously the sanction of one of the Commissioners had to be obtained before a voluntary patient could be admitted to a mental hospital. The time required to obtain this sanction caused delay, which was both inconvenient and dangerous, and the Act of 1913 gave authority to the medical superintendent to admit the patient at once upon a simple application made directly to himself. The ease, convenience, and promptitude of this procedure had proved so attractive that the admissions of voluntary patients into mental hospitals in Scotland rose from 112 in 1913 to 181 in 1914 and to 263 in 1919; during the quinquennium 1919 to 1923 the total admissions of voluntary patients had amounted to 1,672. In consequence of this it was now found that 40 per cent. of all the private patients entering mental hospitals in Scotland did so as voluntary patients, and that this percentage was increasing every year. This method formed an ideal alternative to certification, and it was not straining language to call this development a revolution of most happy character, and one that was desired by the public. If to the number of voluntary admissions were added the cases placed in the Royal Hospital at Morningside under the authority of a medical certificate of emergency, it would be found that no less than 95 per cent. of all the cases were admitted without a judicial order. It therefore appeared that the abolition of judicial orders was not so revolutionary a step as it would seem, for no harm appeared to have resulted from the absence of an order in the cases mentioned. A hardship existed in relation to the admission of voluntary patients into certain kinds of mental hospitals in that the Government grant-in-aid of £7 9s. 6d. a head, which was given to parishes towards the support of certified patients, was withheld from the support of voluntary patients belonging to a parish. Certain parishes, however, notably in Argyllshire, and recently the Edinburgh Parish Council, had decided that the poor should enjoy in future the advantages of voluntary treatment, notwithstanding that this involved relinquishing the grant-in-aid.

Early Treatment.

An important consideration which attached to these two noteworthy developments that had sprung into existence during the last five or ten years was the possibility of earlier treatment. The nursing home offered early treat-