basal metabolic rate is raised only if it was previously low. Results begin to be apparent in from two to four days. With improvement in the patient's health and strength the extract may be gradually reduced until the maintenance dose is reached. This varies from 1 to 5 c.cm. twice daily. In time it may be possible to stop the administration of cortical extract for some months, but this should not be attempted until the patient is gaining in weight. Treatment with sodium should not be discontinued. Progressive tuberculous lesions and secondary infections will call for increased dosage of extract.

If a crisis be protracted and in the chronic or stationary period of the disease cortical hormone exerts no striking clinical effect, and one's enthusiasm should not allow one to overlook the fact that patients have died in spite of large doses of cortical extract. Salt and cortical extract are not panaceas in the treatment of this condition.

TREATMENT OF DEHYDRATION

It is considered by many that the symptoms of a crisis are due largely to dehydration and by others to hypoglycaemia. Energetic measures should be taken to combat these conditions. In a crisis 500 c.cm. of a 5 per cent. solution of glucose in 5 or 10 per cent. saline should be injected as soon as possible intravenously and repeated if necessary during the next few days. The solution should be given slowly by the drip method, as patients in a crisis not infrequently have a rigor if it be injected more rapidly. It is essential that cortical extract be given intravenously before or during the administration of the saline, as without extract an intravenous saline is not maintained in the circulation and subcutaneous and intraperitoneal salines are not absorbed. When the vomiting is relieved fluid should be taken in large quantities by mouth.

Suprarenal Insufficiency

Acute suprarenal insufficiency is caused by acute infections, thrombosis of the suprarenal vessels, and bilateral haemorrhage into the suprarenals. Suprarenal haemorrhage may occur in the newborn as a result of eclampsia, trauma during birth, asphyxia neonatorum, and superinvolution of the cortex; in older people, as the result of severe infections, extensive burns, syphilis, and as a manifestation of a haemorrhagic diathesis.

In the newborn the clinical picture resembles pneumonia, with fever, dyspnoea, and cyanosis, but there are no pulmonary signs. In older children and adults the onset is one of acute abdominal pain, vomiting, diarrhoea, and fever. In both groups other features are: extreme asthenia and prostration, purpuric eruptions, dehydration, low blood pressure, convulsions, and coma. In the cases of haemorrhage there are, in addition, the general symptoms and signs of shock, with local signs consisting of abdominal distension and a palpable swelling in one or both renal regions. The condition is not easy to diagnose and is rapidly fatal. Therapeutic measures consist in the treatment of shock and the administration of cortical extract and of intravenous glucose salines.

Chronic suprarenal insufficiency is not well defined. Patients with debility, emaciation, hypotension, impotence, or a low basal metabolic rate are sometimes thought to be suffering from chronic suprarenal insufficiency. Some of these cases may be incomplete forms of Addison's disease, others due to hypo-adrenalism, but in the majority it is doubtful whether the suprarenals can be held responsible. No beneficial effect is obtained with cortical extract in the absence of an adrenal lesion.

[A bibliography will be given at the foot of the next article.]

TEMPORARY TREATMENT IN MENTAL HOSPITAL PRACTICE

BY

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The Mental Treatment Act of 1930, Section 5, permitting treatment of patients on a temporary basis, has now been in operation for six years. It has therefore had time to be fully investigated, and as medical officer at an institution where temporary patients constitute the largest proportion of annual admissions to any hospital in England and Wales I thought it would be of interest to survey the results and discuss the numerous difficulties.

Whether the large percentage of temporary patients is a matter for approval or not is a debatable point. Actually the number admitted to this hospital is much in excess of the general estimated figure according to even a liberal interpretation of the Act. In a memorandum published in the Board of Control Report, 1934 (Appendix, p. 88), it is pointed out that the type of patient who can be dealt with by this section of the Act is strictly limited, although it is regretted that the procedure is not being utilized in the case of rate-aided patients to anything like its full possibilities.

In Derby, however, the procedure is very much in favour, due to certain definite advantages that accrue from this method and are enumerated later. The proximity of the hospital to the town, and the fact that the public assistance authorities—officers and doctors—are familiar with the provisions of this section, are also contributory factors to the large percentage of admissions on a temporary basis. It will be noted from Table I that the percentage has risen annually, and therefore it must be a useful and desirable way of gaining admission to hospital.

TABLE I.—Showing the Annual Number of Admissions during the Past Six Years by the Three Channels of Entry, and also the Percentage Number of Direct Temporary Admissions.

Year	Voluntary	Temporary	Certified	Total	Percentage Direct Temporary Admissions
1931	8	29*	78	115	26
1932	12	34	55	101	34
1933	15	49	57	121	42
1934	27	52	56	135	39
1935	29	82	47	158	52
1936 to Nov. 30	17	58	38	113	51

The statistics published by the Board of Control show that temporary treatment is much more frequently adopted with private than with rate-aided patients, and that "one law for the rich and one for the poor" exists to some extent, though Parliament endeavoured to remedy this by the Mental Treatment Act, 1930. At the present time many non-volitional cases are not receiving the benefit of the provisions to which they are entitled, due largely to a tendency to adhere to the familiar and simpler procedure of certification. There is no doubt that the stigma attached to certification is very strong in the public mind, and that as more up-to-date accommodation is made available treatment by voluntary or temporary methods will be demanded by them and granted if it is at all applicable. It has been estimated that only one-fifth of the total number of temporary patients in England and Wales have ultimately to be certified, which indicates that this procedure is serving a useful purpose.

Advantages and Disadvantages of Temporary Treatment

While this analysis is open to criticism in that a much larger number of patients are being dealt with than strictly belong to the class to which the temporary clause applies it may help to demonstrate to those who are unwilling to accept such a class that the latter can be handled without too great administrative difficulties.

The disadvantages of temporary treatment chiefly affect hospital administration, and can only be gauged after actual experience. For example: (1) Regrading of patient has often to take place after a few weeks; twenty-eight days is the time limit stated in the Act after the patient recovers volition. (2) If the patient is made voluntary he will often not stay long enough to effect a complete recovery. (3) If the patient has to be certified the relatives frequently object and the onus falls on the hospital doctor. (4) If extension of temporary treatment is indicated the application has to be sent to the Board of Control within a stated time in order to obtain its consent—"not more than one month nor less than fourteen days before the expiration of the current period of treatment." The relative often delays or fails to sign the application, and one has to resort to certification.

Two great advantages are gained by temporary treatment: (1) certification is avoided by substituting two medical recommendations, and (2) the stigma and the inconvenience associated with certification of procuring a justice is avoided and therefore temporary treatment is preferred by the relatives. Another advantage is that the mental state of the patient is more closely observed with regard to his future prospects. His case is constantly cropping up for discussion pending reclassification, and the question of extension of treatment at the end of six months and nine months calls for close observation.

"Good" and "Bad" Types of Temporary Patients

The large number of temporary patients admitted annually (Table I) cover a wide range of conditions. Depending on the response to treatment and the progress they make they can be grouped into "good" and "bad" types from the point of view of hospital classification. In the former category one includes those who become quite clear mentally after a varying period and make an uninterrupted recovery. They are fit to be discharged within twenty-eight days after regaining volition or preferably continue treatment a little longer as voluntary patients. A large number of cases conform to this type, and a few examples, illustrating a variety of conditions, are recorded from the admissions during the last year.

Case 1.—Male, single, aged 32, was admitted on September 7, 1936, suffering from acute alcoholic confusion. He was disorientated, rambling in his talk, and hallucinated—saw golf-balls giving off poison-gas and frothing when they reached water. Two days later he was quite rational in his talk and behaviour, and took his discharge on October 14—five weeks after admission.

Case 2.—Male, single, aged 19, was admitted on February 20, 1936, in a state of stupor. He was mute, rigid, negativistic, in poor physical condition, and had to be fed with all meals. He remained in this state for three months, but had improved sufficiently to be made a voluntary patient on July 24. Thereafter he had parole, worked in the garden, and put on 2 st. in weight before taking his discharge on September 22.

Case 3.—Female, married, aged 20, was admitted on December 10, 1935, as a case of puerperal insanity. Child born on November 5, 1935. Confusion with depression. Rapid recovery, and patient discharged on January 17, 1936.

Case 4.—Female, married, aged 29, was admitted on August 30, 1936, suffering from puerperal insanity. Child born on August 19. Confusion with great excitement. After six weeks—October 16—patient was sufficiently well to go home on trial.

Case 5.—Female, married, aged 32, was admitted on November 24, 1935, in a confused dazed state with physical and mental signs suggestive of organic brain disease—speech, gait, and conduct being affected. Laboratory findings were negative, and symptoms cleared up rapidly, permitting her to be discharged recovered in seven weeks' time—January 4, 1936.

Case 6.—Female, married, aged 40, was admitted on January 21, 1936, in a very toxic state. She was delirious, extremely restless, and hallucinated. Temperature 100.6° F., pulse 120. Her condition was critical for some days, but she improved gradually and was fit for discharge on April 17.

Case 7.—Female, married, aged 61, was admitted on February 6, 1936, suffering from severe depression. She was agitated at times and quite unable to discuss her affairs. She improved sufficiently after four months to become a voluntary patient, and took her discharge one week later—June 15.

The designation "bad type" can be applied to those who recover fairly well but are not fit for discharge and are subject to relapse. Regrading is often troublesome in these cases, and one has to be guided by the history, nature of illness, and home circumstances whether to recommend voluntary treatment or decide on certification. It is advisable to have a good knowledge of the patient's attitude and his willingness to continue treatment, for if this is not done before making him voluntary he may demand his discharge in a few days when he is far from well. In some of these cases certification is often difficult because the mental symptoms may have improved considerably or are difficult to elicit, and the certifying doctor who is seeing the patient for the first time can only submit a weak certificate on "the facts observed by himself at the time of examination."

The following tables record all the patients discharged and regraded at different periods during five years.

TABLE II.—Showing how Temporary Patients were dealt with during the Years 1931 to 1935

	1931	1932	1933	1934	1935	Totals
Recovered	13	10	16	7	19	65
Relieved or not improved	5	5	5	1	5	21
To voluntary class ...	4	4	16	26	33	83
To certified class ...	2	10	1	7	10	30
Died	5	4	10	7	14	40
Transferred	0	1	1	4	1	7
Totals	29	34	49	52	82	246

TABLE III.—Showing Changes in Temporary Patients during the Quarters of the Year

	Within 3 Months	Within 6 Months	Within 9 Months	Within 12 Months
Recovered	14	42	5	4
Relieved or not improved	7	10	2	2
To voluntary class ..	10	40	12	21
To certified class ...	1	4	3	22
Died	35	5	0	0

General Considerations

As a general rule, after the patient has recovered volition one is inclined to give him a chance unless certification is unavoidable. Consequently many are made voluntary (Table II), and many leave before their recovery is complete. Table III shows the large number of patients discharged within six months. Some of these undoubtedly return to hospital, but this need not condemn the system. We claim that our hospitals are becoming more like general hospitals, and there the patients do not remain until the physician is absolutely assured of their recovery. Many have to complete their convalescence at home or attend the out-patient department, and now patients suffering from mental illness have that advantage as the result of the numerous clinics being established at various infirmaries.

It is agreed that Section 5, dealing with temporary patients, is difficult and complicated, but it undoubtedly serves a useful purpose in transient mental illness. Con-

siderable controversy has ranged round the words in the Act "incapable of expressing himself as willing or unwilling to receive such treatment," but, generally speaking, cases following childbirth, the various types of stupor, and all cases where confusion is marked, have the right to receive treatment on a temporary basis. The public are now well aware that such facilities exist, judging from the number of inquiries and interviews with patients' friends, and when any question of certification arises it is not well received as a rule.

Unfortunately, though the terms "voluntary" and "certified" are easily understood, difficulty always arises with "temporary" classification. The relatives generally think that the latter term indicates treatment for six months only, and much explanation is needed to give them a fuller knowledge of the Act.

Conclusion

It will be seen that temporary treatment does confer some benefit to the patient and his friends, while certain difficulties—not insurmountable, however—are added to hospital administration. It is possible that by widening the scope of the section, or simplifying the necessary provisions, the difficulties would be much lessened, and it is interesting to note that in the latest enactment (Rhodesia) temporary treatment is extended to resistive as well as non-volitional cases.

I have to thank Dr. J. Bain, medical superintendent, for permission to use the hospital records.

NEW YEAR HONOURS

A supplement to the *London Gazette* of January 29 contained the first list of honours conferred by King George VI. The names of the following members of the medical profession are included in the list.

G.C.S.I.

Gondal, Maharaja of, His Highness Maharaja Shri Sir BHAGWATSINHI SAGRAMJI, G.C.I.E., M.D., F.R.C.P.Ed., LL.D. (Hon.).

K.C.V.O.

JOHN FRASER, M.C., M.D., F.R.C.S.Ed., F.A.C.S. (Hon.), F.R.A.C.S. (Hon.). Surgeon to H.M. the King in Scotland, Regius Professor of Clinical Surgery, University of Edinburgh.

Knights Bachelor

JOSEPH ARTHUR ARKWRIGHT, M.D., F.R.C.P., F.R.S. Member of the Agricultural Research Council.

JOHN HENRY MORRIS-JONES, M.C., L.R.C.P. and S.Ed., L.R.F.P.S.Glas., J.P., M.P. for Denbigh. Lord Commissioner of H.M. Treasury (unpaid) since 1935.

JOHN CHARLES GRANT LEDINGHAM, C.M.G., D.Sc., LL.D., F.R.C.P., F.R.S. Director of Lister Institute, London. Professor of Bacteriology, University of London.

E. KAYE LE FLEMING, M.A., M.D. (Hon.), M.B., B.Chir., Chairman of the Council of the British Medical Association. Direct Representative on the General Medical Council.

C.B. (Military)

THOMAS SEYMOUR COATES, O.B.E., M.B., B.S., Major-General, late R.A.M.C. Honorary Physician to the King. Deputy Director of Medical Services, Aldershot Command.

ALEXANDER WILLIAM MONTGOMERY HARVEY, M.B., Ch.B., Major-General Indian Medical Service. Honorary Surgeon to the King. Deputy Director of Medical Services, Northern Command, India.

C.M.G.

WILLIAM HENRY KAUNTZE, M.B.E., M.D., D.P.H., Colonial Medical Service. Director of Medical Services, Uganda Protectorate.

C.I.E.

RICHARD EDWARD FLOWERDEW, M.B., Ch.B., D.T.M. and H., Lieutenant-Colonel Indian Medical Service. Inspector-General of Prisons, Bengal.

GRAHAM COLVILLE RAMSAY, O.B.E., M.D., D.T.M. and H., Deputy Director of the Ross Institute of Tropical Hygiene, London School of Hygiene and Tropical Medicine.

C.B.E. (Military)

WILLIAM JAMES CARR, B.Chir., M.R.C.S., L.R.C.P. Surgeon Captain, Royal Australian Navy.

C.B.E. (Civil)

PERCIVAL ALFRED DINGLE, M.R.C.S., L.R.C.P. Principal Medical Officer to the Government of North Borneo.

O.B.E. (Military)

GEORGE BOYLE HANNA, L.R.C.P. and S.Ed., L.R.F.P.S.Glas., Lieutenant-Colonel Indian Medical Service. Officer Commanding, Indian Military Hospital, Quetta.

O.B.E. (Civil)

BERNARD HART, L.M.S.S.A., Honorary Consulting Radiologist, Doncaster Royal Infirmary.

WILLIAM STEWART EMPEY, M.B., B.Ch., Lieutenant Indian Medical Service. Recently leader of British Ambulance Unit No. 1 in Ethiopia.

GEORGE MONCRIEFF BARRON, M.B., Ch.M., F.R.A.C.S. Member of Council, New South Wales Branch of the British Medical Association. For social welfare services in the State of New South Wales.

SYDNEY LETTS DAWKINS, M.B., Ch.B. For services in connexion with the St. John Ambulance Brigade in the State of South Australia.

VICTOR WILLIAM TIGHE MCGUSTY, M.B., B.Ch., D.T.M., Colonial Administrative Service. Secretary for Indian Affairs and Inspecting Medical Officer, Fiji.

WILLIAM EGBERT THOMPSON, M.B., Ch.B. Surgeon Specialist, Palestine.

M.B.E. (Military)

EUGENE DUCKWORTH, 1st Class Assistant Surgeon, Indian Medical Department.

M.B.E. (Civil)

MANIKKAM DURAI RAJ DAVID, M.B., C.M. Madras, F.R.C.S.Ed. Third Surgeon, General Hospital, Rangoon, and Police Surgeon, Rangoon, Burma.

HENRY CECIL PHILLIPS, Major Indian Medical Department. Superintendent of the Punjab Vaccine Institute, Lahore, Punjab.

BADRI PRASAD. Sub-Assistant Surgeon, Nyasaland Protectorate.

Bar to Kaiser-i-Hind Medal (First Class)

MISS LOUISA HELENA HART, M.D. Medical Missionary, Madanapalle, Chittoor District, Madras.

Kaiser-i-Hind Medal (First Class)

GEORGE MCGREGOR MILLAR, O.B.E., M.B., B.Ch., Lieutenant-Colonel I.M.S. (retired). Director, Medical Services, Jammu and Kashmir State.

RESEARCH IN BLOOD DISEASES

GRANTS AND SCHOLARSHIPS

The trustees of the Lady Tata Memorial Fund invite applications for grants and scholarships for research in diseases of the blood, with special reference to leukaemia, in the academic year beginning on October 1, 1937. Grants of variable amount are made for research expenses or to provide scientific assistants to senior workers. Scholarships are awarded as personal remuneration, and they ordinarily have the value of £400 per annum for whole-time research, with proportionate adjustment for work on a part-time basis where this is approved. The grants and scholarships are open to workers of any nationality.

Applications must be submitted before March 31, 1937, and the awards will be made by the trustees in June. Further particulars and forms of application may be obtained by writing to the secretary of the Scientific Advisory Committee, 138, Bedford Court Mansions, London, W.C.1.