MODERN THERAPY IN DEPRESSION

The rapid development in psychiatry, especially in the field of drug treatment, has given rise to numerous problems and questions. In order to provide an opportunity for the discussion of various facets of the complex problem of treatment in depressive conditions, three symposia were held recently. The first symposium was held in Cape Town on 9 August 1960 under the auspices of the Department of Medicine of the University of Cape Town; the second was held in Johannesburg on 26 August 1960, under the auspices of the Department of Psychiatry and Mental Hygiene of the University of the Witwatersrand; and the third was held in Durban on 4 October 1960, under the patronage of the Faculty of Neurology and Psychiatry of the College of Physicians, Surgeons and Gynaecologists of South Africa.

CAPE TOWN SYMPOSIUM

A film entitled 'Faces of depression' showing a cross-section of depressive cases was projected, after which Prof. J. F. Brock, of Cape Town, opened as first speaker of the evening. He stated that depression was a problem of everyday practice. Every general practitioner and specialist had to be prepared to recognize and differentiate a depression from other conditions. The main purpose of this symposium was to stress the universality of serious depression, its frequency, and its appearance in every field of medicine. The present generation of medical students has a better opportunity of studying this field, although teaching is still inadequate, and Professor Brock expressed the hope that the symposium would contribute towards bringing this problem into its proper perspective.

Dr. H. A. Walton, of Cape Town, discussed the psychiatric aspects of depression and outlined briefly the history of mental illness. He pointed out that not every depressive patient had clear target-symptoms, and to miss a depression was probably the most common mistake made in medicine today — a mistake which very often led to suicide or attempted suicide by the depressive patient. The physician, therefore, could not fail to be interested in this problem.

Dr. Walton discussed reactive depression, where definite precipitating factors are present, and endogenous depression (a major form of depression) in which hereditary factors are predominant.

Statistical information given by Dr. Walton disclosed that of every 100 persons hospitalized, 50 spent less than 4 months continuously on therapy. Out of 100, 9 were hospitalized continuously for 4½ years. The average expected stay in hospital was just under 1 year. However, Larsen, of Sweden, estimated that only 14% of all the patients suffering from manic depressive psychosis were hospitalized.

After discussing the possible causes of endogenous depression — mentioning evidence of organic and hereditary factors — Dr. Walton concluded by describing the complex range and form of diagnoses made in the depressions which finally rested with the patient's description of his mood and feelings.

Dr. S. Wolff, of Cape Town, spoke on the psychotherapy of depression and pointed out that whatever the diagnosis and plan of medical treatment was — outpatient treatment, drug treatment, or ECT — psychotherapy was essential in order to understand the emotional needs of the patient and the peculiarities of his response to other people.

With reference to Freud's paper 'Mourning and melancholia' Dr. Wolff explained that mourning and bereavement was the result of the loss of a loved object and the person could not be expected suddenly to adjust himself to this loss. His thoughts tend to dwell on the lost person, but in time he would make new relationships and readjust himself. The depressed case, however, is a pathological case and the patient cannot make an adjustment on his own. It is here that the psychotherapist makes a valuable contribution. The patient considers the doctor to be very important and a person with whom he can discuss his problems. As the doctor is seen in a very special light he must be aware of the patient's feelings, his needs, and his frustrations. Modification on the part of the doctor is necessary in order that he may, irrespective of the various aetiologies and treatments, enable the patient to go out into the world free from his emotions and frustrations.

Dr. J. M. MacGregor, of Cape Town, discussed the physical methods of treatment and mentioned that in 1949 Gordon collected 50 theories of the mechanism of electroconvulsive therapy. Half of these were psychological and psychoanalytic theories, but from a physical point of view he described 6 possible mechanisms of electro-convulsive therapy, namely:

1. Structural. Changes may occur in diseased cells of the brain, but not much is known in this connection.
2. Endocrinal. Steroid formation is increased.
3. Anoxia. The addition of oxygen gives a better response.
4. Autonomic factors. There is not much to support this.
5. Histamine reactions within the brain.
6. Changes in the permeability of membranes. This seems to be the most attractive theory.

Dr. MacGregor discussed biochemical changes and electro-encephalographic changes which resulted from the use of various psychotropic drugs and electroconvulsive therapy. Firstly, 2 groups of psychotropic drugs were tested in combination with ECT. The first group accelerated the E.EG and increased the voltage and frequencies of waves. This group contained some of the MAO inhibitors and 'ritalin'. The second group depressed the voltage but produced large slow waves. This group contained among others 'tofranil'. 'Tofranil' seems to have a blocking effect on the reticular activating system. It would also seem that many of the psychotropic drugs have an anticholinergic action.

The chairman of the 3 symposia, Prof. L. A. Hurst, of Johannesburg, then spoke about drug treatment. He restricted his lecture to the potent modern antidepressant drugs, notably imipramine or 'tofranil' and the mono-amine-oxidose inhibitors. He differentiated between the chemical compositions and actions of the various psychotropic drugs and then gave an account of pathological studies undertaken in Switzerland and England on imipramine.

He quoted statistics from workers in this country (Drs. M. M. R. Clarke and G. M. Garrett) and from overseas, from which it appears that the success rate in the treatment of endogenous depressions with 'tofranil' lies between 70 - 75% and in reactive depression approximately 10% lower.

Professor Hurst went on saying that clinical trials were also in progress to compare 'tofranil' with the MAO inhibitors and a nation-wide comparison is planned by the Medical Research Council of Britain. This points to the fact that the effectiveness of these agents is recognized.

Professor Hurst said that it was obvious that 'tofranil' and the MAO inhibitors would not replace ECT. There is a school of thought, however, which maintains that the actual number of treatments can be reduced by the combination of ECT with 'tofranil' or the MAO inhibitors. He stressed the point that in severe depressions with suicidal danger the application of ECT should not be delayed.

In conclusion, Professor Hurst mentioned the possibility of interesting research on the mode of action of these new antidepressant drugs and biochemical genetics.

JOHANNESBURG SYMPOSIUM

Prof. G. A. Elliott, of Johannesburg, was the first speaker of the evening. He discussed the general aspects of mental hygiene. Referring to the film 'Faces of depression', in which patients are shown who had had 3 or 4 surgical operations before the depression was diagnosed, he pointed out how important it was that the physician should always be on the lookout for such conditions. Hypochondriasis may be the first if not the only manifestation of a serious impending depression. Professor Elliott pointed out that it is not enough to know that a patient has no organic disease. This is the least important part of the diagnosis. The physician should make a positive diagnosis of the psychiatric state. The personality of the patient should be studied to find out what his psychiatric moods have been in the past.

On the other hand, it is equally important that the physician should realize that physical illness, whether it be an infection, diabetes, metabolic disorder, etc. can present with mental symptoms.

In conclusion Professor Elliott pointed out once more that it must be remembered that in every person who comes for consultation there are both physical and mental symptoms.

Dr. T. E. Lynch, of Johannesburg, mentioned the well-established landmarks in clinical psychiatry, namely dementia praecox or schizophrenia and manic depressive psychosis. Dr. Lynch then proceeded to discuss the depressive phase of the manic depressive psychosis. After describing the main forms of depression, he described the danger of depression disguised by somatic symptoms. Very often the physician, the ophthalmologist, the gynaecologist, and the surgeon see these patients in the first place. Unless specific inquiries are made, the depression passes undetected, and Dr. Lynch stressed the importance of being on the lookout for the ever-present risk of suicide.

Dr. Lynch then referred to the so-called involutional melancholia which illustrates other features which may be associated with depression: Marked agitation, restlessness, and anxiety over trifles; often these symptoms were combined with obsessive compulsive features and hypochondriacal complaints. Delusions of degeneration and destruction (e.g. that their brains have melted) may also be prominent.

People subjected to very severe life situations may develop such intense feelings that they must be regarded as ill — the so-called reactive depression. Dr. Lynch believes that people who develop this type of depression have a propensity for developing mental illness. There is therefore always an endogenous element in the production of a reactive depression. In conclusion Dr. Lynch referred to psychotherapy which plays a relatively minor, but nevertheless important, part in treating depression. The patients should be encouraged and given hope. Attempts to probe into the personal life and the personal details of the patient's environment should be avoided, since these may only intensify the depression. Firm and confident attitudes should be conveyed to the patient, indicating that he can be helped. This is thoroughly justified in view of the very effective treatments which we now have at our disposal.

Dr. M. B. Feldman, of Johannesburg, discussed the physical methods of treatment of depression. After describing the characteristics of the various forms of depression, Dr. Feldman discussed the electroconvulsive therapy. With modern intravenous anaesthesia, given together with an intravenous muscular relaxant, ECT is safe, rapidly effective, and psychologically well tolerated. The death rate per treatment in a recent British series of a quarter of a million treatments has been calculated to be ·003%. Another point which must be recorded in favour of ECT is that in the majority of cases some improvement is immediately shown and appreciable improvement is evident after the third or fourth treatment, that is to say within a week of commencing treatment. This must be contrasted with the period of time (2 - 6 weeks) which it usually takes for anti-melancholic drugs to become effective. Furthermore, Dr. Feldman said that all these drugs were liable to cause various side-effects: some uncomfortable, some dangerous.

Before the unfortunate melancholic patient can achieve the treatment which would help him, he has several hurdles to surmount, e.g. the stigma associated with mental illness, difficulties arising from his illness, and social prejudice. Dr. Feldman then stressed the importance of immediately recognizing a depression. When the physician, having failed to have found evidence of organic disease, uses such phrases to the melancholic as 'there is nothing wrong with you' or 'pull yourself together', the evidence of the absence of understanding of the patient on the part of the medical attendant may result in the patient abandoning hope of help from doctors and thus fortifying his resolution to end his life.

The chairman of the symposium, Prof. L. A. Hurst, then repeated the remarks he made on drug treatment in Cape Town.

Dr. D. du Plessis, of Pretoria, opened the discussion from the floor by saying that he could not agree with Dr. Feldman's attitude in practically rejecting the chemotherapeutic approach to depression and advocating in all cases shock treatment. In his experience shock treatment can be very much reduced by the additional use of chemotherapeutic agents. He asked Dr. Feldman whether he had ever seen cases that had not responded to electroshock treatment, but which have responded remarkably to the MAO inhibitors or 'tofranil'. He said that he remembered 2 cases who had been treated with electroshock with no result, but responded dramatically, one to 'tofranil' and the other to 'marsilid'.

He agreed, however, that in an urgent case where suicide is a possibility and where an acute and deep depression is present, electroshock treatment should be instituted immediately. On the other hand, chemotherapeutic treatment is indicated for the patient who can still carry on with his work and who cannot be forced to go to a nursing home.

Dr. du Plessis also stated that he did not agree with Dr. Feldman that it usually took 6 weeks for the effect of chemotherapeutic agents to become noticeable. It has been reported, and he personally had had cases, where the improvement had set in between the fourth and seventh day. On an average the improvement sets in after about 14 days.

Dr. du Plessis felt that side-effects are of little importance because, after treatment, the patient feels so much better that he can bear the side-effects without any discomfort. As regards the question of the dangerous side-effects mentioned by Dr. Feldman, Dr. du Plessis said that apart from the original 'marsilid' he did not think that any cases of serious and dangerous side-effects have been reported. In concluding Dr. du Plessis pointed out that in his opinion ECT is no longer essential in every case, but it still has a place in the treatment of very serious cases.

In replying Dr. Feldman agreed with Dr. du Plessis and said that he also knew of cases which failed to respond to ECT but which improved after drug treatment. However, he thought that the fact that they responded to one or another drug may not necessarily be significant, because depression is an illness which tends to remit spontaneously.

He also found it difficult to decide, without adequate reports of control studies, whether the use of these various drugs together with the ECT reduced the number of ECTs required. In the individual patient one attack may last a long time and a subsequent attack a short time with or without treatment of any sort.

Dr. Feldman concluded in saying that he tried to point out that the new drugs should not be used indiscriminately.

After several further contributions towards the discussion from the floor the chairman, Prof. L. A. Hurst, closed the symposium.

DURBAN SYMPOSIUM

Prof G. A. Elliott discussed the general aspects of mental hygiene as he had done in Johannesburg.

Dr. B. Crowhurst Archer, of Durban, spoke on psychiatric aspects of depression and psychotherapy. He said that the term 'depression' may refer to either a symptom, or a syndrome or disease entity. He said that there were different common varieties of endogenous depression, i.e. manic depressive states, involutional depression, and senile depression.

While speaking about the suicidal danger, Dr. Crowhurst Archer said that it was commonly believed that those who talk about suicide never carry out their threat. In practice, however, it is found that one third of those patients make an attempt to kill themselves. Half-hearted suicidal attempts are often disregarded as being hysterical. These patients are, however, suffering from retardation and as soon as their condition improves they tend to employ more effective and successful methods.

Dr. Crowhurst Archer stated that he agreed with the school of thought which believes that despite physical methods of treatment it is still necessary to distinguish between psychogenic, induced, reactive depression and the more endogenous type of illness; the former sometimes responds to psychotherapy, the latter very rarely.

The speaker stressed the importance of deciding, during the first interview, whether the patient could be treated as an out-patient or whether he should be hospitalized. Treatment as outpatients is most desirable in order not to disturb the occupational or other interests of the patient. In other countries there are the advantages of day and night hospitals. These amenities have unfortunately not yet been provided in this country.

Hospital treatment, however, may be necessary for the protection of the patient (suicidal danger) or the protection of other people, or in order to carry out special treatment (cortisone, narcosis, ECT, etc.)

Speaking about the physical methods of treatment Dr. R. W. S. Cheetham, of Durban, gave a brief summary of the historical data which led to ECT.

Modern electroplexy (Dr. Cheetham stated that the use of the word 'shock' was 'unpsychological') is quite different from the type of convulsive therapy used some years ago. With the application of muscle relaxants, light anaesthesia, and the application of the glissando technique, the reaction of the patient is mild, and 2 nurses can control the effects of the convulsion. Before relaxants were used it was relatively frequent to find that, during ECT, the patient developed fractures of the vertebrae, fracture-dislocations of the humerus, and possibly dislocations of the jaw. These complications do not occur with the modern type of treatment, so that the treatment in itself is relatively simple and remarkably free from risk.

The number of treatments varies from patient to patient. When the stage is reached where the patient shows an improvement of mood and is beginning to sleep well, to have an appetite, and to be active again, he has 'turned the corner'. After that he should receive about 2 - 3 treatments more. Some patients may need a second course of treatment after a couple of months or they will possibly need 1 treatment per month as a maintenance dose. However, today, using the thymoleptic drugs such as 'tofranil' in conjunction with ECT, it is found that the relapse rate is very much lower than it was before, and the need to repeat the treatment is lessened.

Speaking about contra-indications and side-effects of ECT Dr. Cheetham said that there was no reason to suppose that definite brain damage occurs. Reversible changes may happen, probably at the enzyme level, but no real known definite organic brain changes have been reported. Cardiac failure, myocardial infarction of recent origin, extreme degrees of hypotension, and cerebral haemorrhage are, however, definite contra-indications to ECT. It used to be thought that pulmonary tuberculosis was a contra-indication, but this has been disproved.

Dr. Cheetham felt that ECT should preferably be carried out in a hospital or clinic, since the results with ECT in out-patient departments are not satisfactory. He further stressed the point that ECT is a specific treatment; it should not be regarded as a treatment just given at the end because there is nothing more to do. It must be given at the right time and to the right person and in the right place.

Dr. Cheetham then briefly discussed modified insulin treatment, continued narcosis, and deep sleep or hibernation treatment.

In conclusion, Dr. Cheetham expressed the opinion that ultimately ECT would be replaced by chemotherapy and psychotherapy, but at present a combination of ECT and chemotherapy seemed the most effective therapy for depression.