

THE ASSESSMENT OF DRUGS IN OBSESSIONAL STATES

R. PHILPOTT

Institute of Psychiatry, London

Obsessional states are among the few illnesses which may still lead to a protracted course of suffering and disability for both patients and relatives. The more severe forms of the illness have proved remarkably resistant to treatment. Modified leucotomy is of limited benefit to a number of severely disordered obsessive patients (Tan, Marks & Marseet, 1971). Fortunately this group of illnesses is not common, constituting less than 3% of all psychiatric patients. The Maudsley Hospital, because it provides specialist treatment facilities, attracts obsessional patients from a wide area; they still account for only 2–3% of outpatient attendances (Hare, 1965). The relative infrequency of the condition causes problems in assessing treatment effects when single centre projects are undertaken.

Obsessional states are characterized by the following clinical phenomena: recurrent and persistent thoughts, images, feelings, impressions or movements, which are accompanied by an immediate sense of subjective compulsion and a desire to resist that compulsion. These events are recognized as being foreign to the sufferer's personality and the sufferer has insight into the event. Anxiety appears to play a central role and obsessive thoughts and acts have been postulated as representing conditioned avoidance responses to anxiety. Depressive symptoms and more clear cut depressive illnesses may also occur during and at the onset of obsessional illnesses.

Despite the relative ease with which obsessional states can be defined, many symptoms occur particularly with regard to the content of obsessional thoughts; and similarly many different types of compulsive behaviour may be seen. Patients may be classified by the predominance of either ruminations or rituals, though there is a considerable overlap between these two groups. Ruminators may be troubled by obsessional thoughts often related to sexual or violent themes, by recurrent questions with no ready answers, doubts or vacillations, or by obsessional phobia. Lewis (1957) has argued for the retention of the term phobia for situations which induce fear in obsessional states; common precipitants of these phobias are fears of contamination, illness or incompleteness. Obsessional rituals often involve cleansing or checking but they may be bizarre long-standing obsessional illness (Capstick, 1971a; Capstick & Seldrup, 1973). This variation in symptoms causes further problems in the assessment of obsessional states. Any standardized and

acceptable test, or battery of tests, must be either inordinately large or highly flexible in order to be generally applicable.

A third source of difficulty in assessment stems from the relationship of obsessional symptoms with psychological illnesses other than obsessional neurosis. Differentiation between obsessional, phobic and hypochondrial neuroses can at times be remarkably difficult. Approximately one in 30 patients with a primary schizophrenic illness has a secondary obsessional state. Significant association with some organic brain syndromes also occurs. Abraham (1927) described the relationship between depression and obsessional personality, and Gittelson in his review of depressed patients found over 30% to have obsessional symptoms, usually ruminations of harm or violence to themselves or others (Lion, 1942; Stengel, 1945); these ruminations may develop a delusional intensity. The assessment of drugs, especially antidepressants, in the treatment of obsessional states raises the problem of assigning improvement to a specific anti-obsessional factor or to a general antidepressant factor.

Although the obsessional states were delineated years ago and have received much attention since, assessment is still qualitative rather than quantitative. The introduction of new behavioural treatments both behavioural and pharmacological (for example, clomipramine) emphasizes the need for reliable and acceptable assessment techniques. Fortunately a number of techniques recently devised by behaviour therapists (Rachman, Hodgson & Marks, 1971) can be applied. The Leyton obsessional inventory (Cooper, 1970) provides a further research tool.

Assessment of drug therapy

Slater & Roth (1969) describe the therapy of obsessional states with tricyclic antidepressants. After the first report concerning clomipramine in obsessional states (Renynghe, 1968), there were further favourable clinical reports (Cordoba Fernandes & Lopez Ibor, 1967). In England initial reports were made by Rack (1971) and Capstick (1970, 1971b).

Capstick (1973) has reported on three phases of an enquiry into the use of oral and intravenous clomipramine. In the first study (Capstick, 1971a) 24 patients with a mean illness duration of 13.5 yr were treated orally or intravenously with clomipramine up

to 325 mg/day. The patient was assessed on a five-point scale. No other measurements are reported nor was there any control group, assessment of rater reliability or independent rating. Three out of nine patients recovered completely on oral medication and four of the 16 patients who received the drug intravenously also recovered completely: 60% of all patients showed some improvement.

In the second phase of the investigation, a group of 25 patients was divided into those with primary obsessional states and those whose obsessional symptoms were associated with depression or schizophrenia. Assessment was not blind and there was no indication of rater reliability; however, the obsessional symptoms were assessed individually and results expressed as average change scores. Primary obsessionals improved rather slower than did the depressives, but ultimately with equally good results. However, only eight patients remained in the trial after 9 months. The third stage of his study consisted of evaluations using the Shapiro scale on patients with true obsessional states and depressives or schizophrenics with obsessional symptoms. Again obsessional and general symptoms improved, but depressed patients fared better than obsessionals. Thus Capstick, who has treated a large number of obsessional patients, can only suggest that clomipramine has anti-obsessional properties.

Similar trials, undertaken by Marshall (Marshall, 1971; Marshall & Micev, 1973), involved 38 obsessional patients (24 ruminators and 14 ritualizers) treated intravenously with clomipramine up to 350 mg/day. Assessment was on a four-point scale. During the period of infusions the patients were encouraged to face anxiety provoking situations, and were instructed to help each other. The obsessional ruminators showed significant improvement on the disability scale up to 18 months follow-up. The treatment was effective in 70% of cases but was complicated by a large number of epileptic seizures (perhaps indicating a higher median dose than other studies). The trial was uncontrolled and complicated by the use of a technique common in behaviour therapy; namely graded re-exposure. Other similarly planned studies of oral or intravenous clomipramine in obsessional states (Walter, 1973; Beaumont, 1973) or obsessional states in depression (Collins, 1973) used non-standard global ratings, preventing comparison with other studies.

Global rating scales of improvement or function are useful but should be properly validated and shown to have adequate inter-rater reliability.

In most trials so far clomipramine has been regarded as a part of overall treatment—for example Graham (1973) particularly stressed the abreactive quality of the infusions.

Two drug trials of clomipramine used the Leyton obsessional inventory. In the first (Rack, 1973) 21 obsessional patients, of whom only six suffered a

primary obsessional illness without depressive features, were assessed on a four-point scale. Only 14 were assessed with the Leyton obsessional inventory and had pre-treatment scores compatible with those of Cooper's own sample; after treatment there was a decrease in the scores associated with obsessional illness (that is, symptoms, resistance and interference scores), while the trait score, reflecting features of obsessional personality, did not alter.

The other study using the Leyton obsessional inventory (Rigby *et al.*, 1973) also utilized the Hamilton anxiety, Hamilton depression, Taylor manifest anxiety and Beck scales. Despite some improvement on a global rating, significant improvements only occurred on the Taylor manifest scale and (contrary to Rack's findings), the Leyton trait scale. Despite the poor overall response, a few patients did respond and those who did not remained resistant to other treatment, including ECT and leucotomy.

Behavioural treatment

Coincidentally with the introduction of clomipramine, several developments have occurred in the behavioural treatment of obsessional illness (Marks, 1973b). Various assessments of obsessional illness were used to compare the effects of relaxation, flooding and modelling in the treatment of obsessional neuroses, and may be conveniently divided into four classes; clinical rating scales; behavioural tests; attitude scales; and the Leyton obsessional inventory.

The clinical rating scales are a modification of those devised by Gelder & Marks (1966) and Watson *et al.* (1971). Each patient and a 'blind' medical assessor rate each of the patients' five main obsessions for phobic anxiety and phobic avoidance. The scales had previously shown a blind 0.82 inter-rater reliability and a reliability of 0.89 for the totals of the five scales. Behavioural tests consisted of an avoidance test in which patients were asked to perform several behaviours they normally avoided (scoring was the % of items failed), and the patients were asked to rate their subjective fear during the most difficult avoidance test on a 'fear thermometer' with a 0–100 scale. Attitude tests consisted of semantic differentials constructed as described by Marks (1965). All these measures had been used in previous assessments of therapeutic effects and had been found to be reliable measures on a number of indices. The clinical ratings and behavioural ratings provided flexible measures that could be tailored precisely to the assessment needs of any particular patient.

These assessments are primarily useful for within patient comparisons. To use these assessments adequately some expertise and additional time is required of the clinical psychiatrist. The Leyton inventory can, on the other hand, be administered by non-medical personnel such as the ward nurse.

In the third paper (Rachman, Hodgson & Marks, 1973), the results of the outcome criteria are correlated. On the whole, clinical symptom ratings, similar to global ratings, show the least correlation with other factors. Self-rating for obsessional anxiety correlates more highly and more consistently with all the other factors except, unfortunately, the Leyton inventory. The inventory itself displays high consistency between its four measures. The poor correlation between the clinical ratings and the inventory may have been due to the severity of the obsessional symptoms present in Rachman's patients.

Leyton obsessional inventory

The Leyton obsessional inventory has only recently been introduced to research in psychiatry (Cooper, 1970). Before its introduction, no satisfactory inventory of obsessional symptoms was available. Though other widely used questionnaires (Hathaway & McKinley, 1951; Brodman, Deutscherberger & Wolff, 1956; Eysenck, 1959) contain questions on obsessional symptoms and traits, none give adequate cover. The questionnaire items, devised by Cooper and printed individually on cards, are 69 questions to test for either obsessional traits or symptoms. Yes/No replies to these cards indicate the presence or absence of trait or symptom. The majority of positively answered cards are retained, and represented to the subject who rates each item for the degree of resistance or interference it engenders. The results are expressed as summed scores of trait, symptom, resistance or interference. Fifty-two statements from the Cornell medical index are interspersed with the obsessional questions.

The questionnaire was devised to investigate houseproud housewives in a survey of family interaction in East London. It therefore relates particularly to obsessional symptoms prevalent in women and also avoids questions concerning the more distressing symptoms often observed in obsessional patients. Despite these shortcomings the inventory separates obsessional patients, houseproud housewives and normal controls with little misclassification. Obsessional patients score particularly high on interference and resistance scores. The scale is therefore valid on the criteria groups used but its reliability against objective clinical assessment is not high (Rachman, Hodgson & Marks, 1971), perhaps because in Rachman's study the behavioural tests were insufficiently demanding of the patient, a feature of behaviour tests commented on in phobic disorders by Gillan & Rachman (1974).

Further studies of the inventory by Cooper & Kelleher (1973) reveal the presence of three factors which may best be expressed as cleanliness—tidiness, incompleteness and checking, three very common themes in obsessional ruminations and rituals. Kelleher's Anglo/Irish study (1972) using the

inventory shows marked cultural differences on test results. Although Irish subjects had higher scores than English, Kelleher attributed this to pathoplastic cultural factors rather than to an increased incidence of depression.

Kendell & Discipio (1970) examined the relationship between depression and obsessional symptoms by testing depressed patients before and after recovery with the Leyton inventory. Before recovery neurotic and psychotic depressives had scores midway between obsessional patients and normal controls. After recovery all scores fell, those in the psychotic group more than those in the neurotically depressed group. Neither group improved sufficiently that their scores fell within the normal population scores, supporting Abraham's views. Patients with the lowest trait scores showed the greatest improvement irrespective of their pre-treatment symptom score. Trait and symptom scores show positive correlation with neuroticism and a negative correlation with extraversion on the Eysenck personality inventory. The most important influence on high symptom scores before recovery appeared to be the degree of depression. Between 10–20% of variance on symptom, resistance and interference scores was due to improvement of depression. The relationship between depression and obsessional symptoms was further confirmed by the absence of true obsession symptoms among a consecutive sample of 390 manic or hypomanic patients admitted to the Professorial Unit at the Maudsley Hospital.

The change in obsessional symptoms following improvement in depression should be taken into account in treatment trials. To ascribe a specific anti-obsessional effect to one member of the tricyclic group is not justifiable at the present time. Freed, Kerr & Roth (1972) in a retrospective survey of obsessional illness, report treatment results with a variety of tricyclics similar to the results of treatment with clomipramine (Capstick, 1973; Rack, 1973; Marshall & Micev, 1973; Walter, 1973). Other drugs merit inclusion in future trials. The effect of phenelzine in phobic anxiety states (Tyrer, Candy & Kelly, 1973) suggest that some MAOIs may be useful in obsessive phobias. Minor tranquillizers affect behaviour therapy (Marks, Viswanathan, Lipsedge & Gardner, 1972; Johnston & Gath, 1973) in phobic patients and may facilitate behavioural treatment of obsessional phobias. The syndrome of primary obsessional slowness (Rachman, 1974), notable for its low anxiety and response to simple time structuring techniques, also suggests areas of treatment in obsessionals with minor tranquillizers.

Conclusion

There is an undeniable need for the experiments on clomipramine to be repeated in a double-blind

controlled trial, which will almost certainly be multicentred. The Leyton obsessive inventory should be used as a method of assessment, together with a number of clinical ratings of the type introduced by Marks. Depression and anxiety should be measured separately. The adverse effects of clomipramine should also be recorded.

A standardized questionnaire or other technique should be developed to measure the effects of the primary illness on other patient functions and on his environment. Ideally the measures should be applicable to any illness whether physical or psychiatric so that disablement comparisons could be made between illnesses. Such measures would facilitate the measurement of treatment benefits both to the patient and to society in economic terms. Doctors are likely to be called on in the future to

justify their treatment methods in terms of cost and effectiveness.

If clomipramine or other tricyclic drugs are shown to be effective in the treatment of obsessional states, other factors such as the relative value of different tricyclics, the dosage, duration of treatment and most useful route of administration, should be studied. The relationship between anxiety, depression and obsessional states, as well as the facilitative or other effects of behaviour therapy (Marks, 1974) should be established. A more detailed analysis of the effects of treatment may reveal prognostic variables which lead to a greater understanding of illness mechanisms. Thus Capstick & Selstrup (1973) have commented on phenomenological aspects of obsessional illness that have become more apparent during treatment trials with clomipramine.

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