Management of obsessive-compulsive disorder

David Veale, Institute of Psychiatry, London

Obsessive-compulsive disorder is an anxiety disorder characterized by compulsive rituals such as excessive washing and repeated checking and phobic avoidance. The treatment of choice is behavioural psychotherapy, namely exposure and response prevention.

The prevalence of obsessive-compulsive disorder (OCD) is about 2% of the population and there is an equal sex ratio (Turns, 1985). The peak age of onset is in adolescence or the early 20s, although it is known to occur in children. The onset may be precipitated by a life event but the average duration of the illness before presentation is about 10 years (Marks, 1987). Without treatment, the natural course of the illness is chronic and unremitting, although a minority of patients have episodic remissions. OCD can lead to considerable psychological and social handicap which is as severe as chronic schizophrenia. There is a high rate of unemployment and marital and family breakdown among sufferers.

Behavioural psychotherapy, namely exposure and response prevention, is the treatment of choice in OCD. It is brief, directive and problem-orientated but requires the patient to be sufficiently motivated to participate and cooperate actively in his treatment. The management begins with a full history and mental state examination, followed by a behavioural assessment. Rarely there is a history of organic brain disease or basal skull fracture as a primary cause of the OCD. Occasionally there is a family history of OCD which is a clear predisposing factor. Precipitating factors may include a stressful life event.

The degree of handicap and motivation of the patient and the involvement of other family members are assessed as they may be major determinants of behavioural psychotherapy. Mental state examination may reveal a depressive disorder which is usually secondary to the considerable handicap suffered by the patient. If the disorder is severe, it will hinder the patient’s motivation and cooperation and will require prior treatment. Psychosis is normally a contraindication to behavioural psychotherapy but patients with obsessive thoughts of delusional intensity have been successfully treated (Lehliott and Marks, 1987).

Patients with OCD often have multiple diagnoses of other psychiatric disorders including depression, social phobia, social skills deficits, hypochondriasis, generalized anxiety, dysmorphophobia, alcohol or drug abuse, schizophrenia, Tourette’s syndrome or a mixed personality disorder — all of which can complicate the management and may require additional treatment.

Psychopathology

Each of the obsessive compulsive phenomena shown in Table 1 should be assessed in detail in order to reach a formulation of the patient’s problems. Each component is highly idiosyncratic and often not fully revealed to a therapist at the initial assessment either because of the patient’s embarrassment and shame or because of its complex nature. They will now be considered in detail.

<table>
<thead>
<tr>
<th>Table 1. Obsessive-compulsive phenomena</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The obsession</td>
</tr>
<tr>
<td>2. The fear</td>
</tr>
<tr>
<td>3. The avoidance behaviour</td>
</tr>
<tr>
<td>4. The compulsive rituals</td>
</tr>
<tr>
<td>Overt rituals</td>
</tr>
<tr>
<td>Covert rituals</td>
</tr>
</tbody>
</table>

The obsession

Obsessions are recurrent and intrusive thoughts, images or impulses which the patient finds repugnant or anxiety provoking. On calm reflection they are usually regarded as senseless or absurd.

The degree of the belief in the obsession varies; it occasionally reaches an overvalued idea and rarely a delusion. By definition the patient always accepts that the obsession arises from within his own mind and that it is not imposed on him by some outside agency. When obsessional thoughts or images are particularly prominent and repetitive, they are called ruminations.

The key to understanding the relationship between obsessions and rituals is that the former are involuntary (the patient cannot just ‘think of something else’) and that they give rise to anxiety and dysphoria. By comparison, rituals are mainly voluntary acts which decrease anxiety. Obsessions may occur spontaneously or be triggered by a wide range of stimuli which patients avoid in order to prevent their occurrence. Examples of the most common obsessions are listed in Table 2. The content is usually related to the possibility that the patient may become responsible for causing harm to himself or to others in the future.

The nature of obsessional impulses or urges to action is often
vague and the patient may be unable to articulate why it is so repugnant and uncomfortable for him to be in contact with, for example, grease or oil.

**Avoidance behaviour**

OCD is an anxiety disorder with extensive avoidance behaviour. Patients avoid touching or being close to a wide range of objects either to prevent contamination with the feared object or to avoid triggering the obsession and the anxiety that is aroused. Avoidance is an important maintaining factor as it prevents habituation to the feared object or situation.

A unique feature of OCD is the belief that the feared contaminant may be transferred to other objects if they come into contact with one another. This includes minute particles of the contaminant and hence the need in some patients to avoid strenuously touching door handles, toilet seats, wash-taps, dustbins, genitals or other people and the need for strategies such as kicking a door open to prevent touching the door handle or laying several layers of tissue paper on a toilet seat. Other patients with blasphemous thoughts may believe that they are capable of depositing them wherever they go and therefore avoid certain places. Hoarding is another form of avoidance behaviour in which a variety of objects may be hoarded for fear of throwing away something valuable. Nearly all patients with OCD have many subtle avoidances which are easy to miss in the initial assessment but will need constantly reviewing. Cognitive avoidance involves dissociating from the fear and may be experienced as depersonalization. It is particularly difficult to treat.

**The affect**

OCD is primarily an anxiety disorder. Patients suffer from episodic symptoms of anxiety or dysphoria whenever the obsession occurs. Physiological symptoms of anxiety include sweating, palpitations, or the stomach churning but are not usually as prominent as in patients with other anxiety disorders. Guilt is also common whenever some patients don’t perform a particular ritual because they believe they have taken an unnecessary risk of harming themselves or others.

**The compulsive rituals**

**Overt compulsive rituals:** These are voluntary behaviours in response to an obsession which are either excessive or performed according to certain stereotyped rules. All rituals are reinforcing and important maintaining factors because the patient is rewarded with an, albeit temporary, decrease in anxiety. When the rituals become extensive they may even prevent the obsession occurring in the first place. Overt compulsive rituals may be divided into the following categories: 

- **Cleaning or washing rituals:** Cleaning or washing is one of the most common rituals occurring in up to 50% of patients. An example is a patient who washed her hands up to 100 times a day because of the fear of contamination by germs from urine which involved up to five bars of soap a day.
- **Checking rituals:** Checking rituals are repetitive acts performed by a patient to ensure that no harm will come. Examples of patients’ checking behaviour are: repeatedly ensuring that a lock is secure or that a cheque is correctly written, examining themselves for evidence of illness, retracing their steps and checking with casualty departments whether they might have caused an accident. Visual checks may be extremely brief and difficult to detect. Reassurance seeking is a form of checking behaviour in which patients repeatedly seek reassurance from relatives or doctors about the state of their health.

**Repetitive rituals:** Repetitive refers to the repetition of the act according to a set number of times. Acts that have to be repeated are often referred to by patients as ‘erasing’, ‘canceling’, ‘undoing’, ‘compensating’ or ‘neutralizing’ the obsession. An example is a patient who believed that if he repeated a specific movement seven times he would prevent his family being killed or injured.

**Orderliness:** Orderliness refers to the meticulous concern in ensuring that an act is carried out in a precise and ordered sequence (and therefore inevitably repeatedly having to begin again). An example is a patient who spent hours shaving single hairs in a precise sequence. Orderliness may be regarded as a special form of avoidance behaviour because unlike other rituals it is not preceded or accompanied by a significant amount of anxiety. Patients become anxious if the order is not adhered to.

**Covert compulsive rituals:** Covert rituals (or cognitive rituals) are voluntary acts which are performed in the patient’s mind — they are therefore particularly difficult to monitor or control. They consist of similar strategies to overt ritualistic behaviour, especially repeating phrases a set number of times. This has a similar effect of reducing anxiety and is therefore reinforcing.

Sometimes the covert ritual is the same as the obsessional thought and care is required to disentangle the two. An example is a patient who, whenever he heard the number 13 spoken or written, believed that it was unlucky and that a disaster would happen unless he repeated it in his mind seven times in order to ‘erase it’.

**Obsessional slowness**

Obsessional slowness refers to the abnormal length of time carrying out everyday tasks such as washing or getting dressed. Alternatively the patient may be motionless while he ruminates or is racked with indecisiveness as to whether he has correctly performed a ritual; such patients often have great difficulty in arriving for appointments. Obsessional slowness is nearly always secondary to the time spent either ruminating or making a decision, or performing an overt or covert compulsive ritual. It is selective as patients are able to perform other motor acts such as walking or running at a normal speed. Occasionally it is not possible to determine the cause of the slowness in which case it may be termed ‘primary’.

**Treatment**

At the end of the assessment the therapist should be able to produce a formulation that determines the predisposing, the precipitating, and the maintaining factors and a treatment plan. He should negotiate with the patient a list of specific goals that
the patient wishes to achieve. The patient must agree to carry out specific tasks as a means towards the goals, after he has been provided with a detailed rationale. The progress towards the goals is carefully monitored in homework diaries (Fig. 1) and on standardized rating scales.

The method of self-exposure and response prevention is of established value in the treatment of OCD (Mark, 1987). Exposure refers to persuading the patient to come into contact with those objects or activities that he is avoiding without performing any rituals. For example, a patient with fears of contamination was asked to touch a toilet seat and to deliberately ‘contaminate’ as many of his possessions as possible. An exposure task for a patient with orderliness involved asking him to deliberately create disorder and untidiness around his home.

Habituation to a task refers to the decrease in anxiety aroused on repeated presentation of the stimuli and is represented diagrammatically in Fig. 2. It should be repeated regularly (preferably daily) and for sufficient time for the anxiety to subside. Patients should be told not to take any tranquilizers or drink alcohol before an exposure task or use any forms of cognitive avoidance such as ‘switching off’ or dissociating from the task.

Response prevention

This technique was first described by Meyer (1966) and refers to persuading the patient not to perform a ritual that would normally reduce anxiety. It is in essence a form of exposure because it forces the patient to be in contact with the feared object or activity. For example, a patient with cleaning rituals to grease was instructed to stop all excessive washing and, if he should wash his hands, to ‘contaminate’ himself immediately with a tiny spot of oil. Patients are never physically restrained but gently cajoled or persuaded to stick to the agreed treatment plan. Patients are also asked to stop all checking rituals. If the task is too difficult the patient is asked to reduce the frequency of the rituals in a graded manner. A strategy for a patient who repeatedly checked his light-switches and gas-taps was to ask the patient deliberately to leave the lights and main gas-tap switched on, thus exposing him to the possibility that he may be responsible for a possible disaster. Those with repeating rituals are asked not to perform them at all or on a random number of occasions.

Another form of response prevention is that employed to reduce the frequency of requests for reassurance. When relatives and health professionals are bombarded with repeated requests to reassure, they are taught consistently to reply ‘Hospital says ‘No answer’.

Patients who hold overvalued ideas or are deluded are more difficult to persuade to comply with exposure or response prevention (Foa et al., 1983). Some of the techniques described in cognitive therapy have therefore been used as an adjunct to exposure and response prevention although this has not yet been systematically evaluated in a controlled trial (Salkovskis, 1989).

Ruminations

In general, obsessive ruminations are more difficult to treat than rituals because they are more portable and more difficult to control. Exposure to the obsessional thoughts may be facilitated by an audiotaped feedback. The patient is instructed to record his obsessional thoughts (not the covert rituals) on a 30 s loop tape and to listen to the tape continuously with a pair of headphones without performing any overt or covert rituals (Salkovskis and Kirk, 1989).

Thought-stopping is a remarkably widely known but ineffective technique for obsessional thoughts whereby the patient is taught to shout the word ‘stop’ or pull a rubber band whenever he has his thought. After repeated pairings, the shouting is slowly reduced in volume and finally to a whisper to dispel the thought. It may be more useful as an adjunct to response prevention in stopping covert rituals.

Treatment setting

Fortunately most patients with OCD can be treated as outpatients without the need for a therapist to be present when the patient performs the exposure and the role of the therapist becomes that of a supervisor and monitor. Patients may be recommended the book Living with Fear by Marks (1978) which includes a chapter on commencing their own self-help programme. In some cases the therapist may need initially to model the exposure in front of the patient in order to improve the patient’s compliance with the task. Subsequently the presence of a therapist can be counterproductive because the patient may not take responsibility for his own action. A patient with fears of contamination stated that the reason why he was able to...
touch a toilet seat was because the therapist had tested it first and had then told him to perform the task. Specialist inpatient units are only required for those with severe handicaps who live too far away (Thorncroft et al, 1990). For these patients, in order to maintain the gains made on the ward, it is crucial to include a close follow-up of the patient with tasks performed in his own home and to involve the family or relatives as co-therapists.

**Prognosis**

About 25% of patients with OCD refuse behavioural psychotherapy or do not comply with treatment. Of those that comply, about 75% maintain their improvements up to 6 years later (Kirk, 1983; O’Sullivan and Marks, 1990). Residual symptoms are common although the handicap is much less. Patients with OCD are often difficult to manage and the key to relapse prevention is close follow-up by members of their family and the original therapist. Before discharge patients should be taught a relapse prevention plan and how to implement further exposure and response prevention.

**Pharmacotherapy**

It is generally agreed that there is little role for the use of benzodiazepines, beta-blockers or neuroleptics. They may reduce the physiological level of arousal but do not significantly affect the obsessions or rituals. Benzodiazepines carry the risk of dependence and in high doses prevent habituation during exposure. The role of antidepressants in OCD is more controversial. OCD and a depressive disorder often coexist and it is widely agreed that antidepressants are of benefit for the treatment of depression when it is significant enough to interfere with behavioural psychotherapy. The exclusive use of antidepressants, such as clomipramine in patients with OCD but without a significant depressive disorder, is also advocated (Zak et al., 1988). However there is a high risk of relapse on discontinuation of the drug, significant side effects including anorgasmsia and only modest reductions in obsessive symptomatology (Turner and Reibel, 1988).

All antidepressants decrease the level of arousal and do not appear to interfere with habituation in the same way as benzodiazepines. One trial (Cottraux et al., 1987) has found that the combination of an antidepressant (fluvoxamine) and behaviour therapy was superior on some measures to either treatment alone, although this has not yet been replicated. In conclusion, if a patient has difficulty in complying with a behavioural programme or is not making progress, then it may be worth adding an antidepressant such as clomipramine. In comparison with other anxiety disorders, doses of up to 300 mg of clomipramine for 12 weeks may be required.

**Neurosurgery**

Neurosurgery involves stereotactic limbic leucotomy and is indicated only after an adequate trial of behavioural psychotherapy and pharmacotherapy and in cases of grave suffering. It is now carried out in a tiny number of cases each year. Long-term follow-up has indicated improvement in symptoms in up to two thirds of patients with OCD but whether it is of benefit in patients who have failed adequate behavioural psychotherapy and pharmacotherapy remains an open question. The possible improvement in symptoms is also offset by a high risk of side effects such as epilepsy, memory impairment, lethargy, volatility, irritability and disinhibition (O’Sullivan and Marks, 1990). Cottraux J, Nury AM, Mollard E, Bouvard M, Shyrs M (1987) Fluvoxamine and exposure in obsessive-compulsive disorders. Post-test evaluation of a controlled study. Presented at Royal College of Psychiatrists Spring Quarterly Meeting.


**Further reading**

