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Exposure and Response Prevention for Obsessive Thoughts

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Although there have always been reports of people suffering from "ruminations," "pure obsessions," and similar phenomena where no overt compulsions are present, this group has traditionally been considered rare. The common belief was that this specific form, obsessive thoughts without overt compulsions, was a rare but clinically interesting variant of OCD and was highly resistant to treatment. During the last 15 years there have been a number of significant advances that have culminated in the development of effective treatments. The treatment described here is based on a manual developed in the context of a controlled trial of cognitive-behavior therapy for obsessive thoughts (Freeston et al., 1997). After briefly addressing diagnostic issues and assessment, step-by-step guidelines describe how to present and conduct exposure and response prevention for obsessive thoughts. Other issues addressed include troubleshooting, terminating treatment, relapse prevention, and combined pharmacological and psychological treatment.

ALTHOUGH there have always been reports of people suffering from "ruminations," "pure obsessions," and similar phenomena where no overt compulsions are present, this group has traditionally been considered rare. Several well-established treatment programs from around the world report a substantial proportion of people who do not report overt compulsions, ranging from 1.5% to 44% (see Freeston & Ladouceur, 1997a). The median across these studies suggests that 20% would be a reasonable estimate, similar to estimates made by knowledgeable authors over a decade ago. A number of studies on samples of children and adolescents with obsessive-compulsive disorder (OCD) suggest that a somewhat lower figure may be appropriate. The common belief was that this specific form, obsessive thoughts without overt compulsions, was a rare but clinically interesting variant of OCD and was highly resistant to treatment. A wide range of techniques has been reported in the literature, such as thought stopping, but each technique has met with inconsistent success at best.

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Continuing Education Quiz located on p. 463.

During the last 15 years there have been a number of significant breakthroughs. Salkovskis (1985) built on the earlier description, analysis, and treatment recommendations for obsessive thoughts by Rachman and colleagues (Rachman, 1971, 1976, 1978; Rachman & de Silva, 1978; Rachman & Hodgson, 1980) and provided a comprehensive model of obsessive thoughts. He also outlined a detailed treatment approach (Salkovskis & Westbrook, 1989). During the eighties, a number of case reports using variants of exposure also suggested that the approach outlined by Salkovskis was promising. The epidemiological studies, the theoretical and clinical contributions of Salkovskis, and the case reports changed the status of pure obsessions from a rare, treatment-refractory variant of OCD to a relatively prevalent form with interesting treatment possibilities. However, this form has remained poorly known and described in the literature. Even recently, some authoritative sources have still been pessimistic about treatment outcome and continue to recommend thought stopping, diversion, or distraction. This article describes how the basic cognitive-behavioral approaches that have proven successful for the more common forms of OCD can be successfully adapted for obsessive thoughts when there are no overt rituals.

The treatment described here is based on a manual developed in the context of a controlled trial of cogni-

tive-behavior therapy for obsessive thoughts (Freeston et al., 1997). The participants in the trial had no or few overt rituals. If overt rituals were present, they were not functionally linked to the principal obsessions. The emphasis on exposure and response prevention in this article reflects only the desire to provide as much detail as possible on the application of the methods. The cognitive restructuring strategies that are used in conjunction with the exposure-based techniques have been described in detail elsewhere (Freeston, Rhéaume, & Ladouceur, 1996).

Diagnostic Issues

Differential Diagnosis

The American Psychiatric Association's (APA; 1994) *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*) criteria for OCD retains many of the classical features of OCD described in the psychopathology literature. OCD can be diagnosed by the presence of either obsessions or compulsions. There were several important changes from *DSM-III-R* (APA, 1987) that are important for obsessive thoughts. First, the word "senseless" has been replaced by "inappropriate" and the criterion of initial insight has been replaced with "at some time." Second, obsessions are "not simply excessive worries about real-life problems," thus trying to distinguish OCD from generalized anxiety disorder (however, some worries are not about real-life problems and some obsessions may be based in real life). As before, although a diagnosis of OCD does not require compulsions to be present, it is required that "the person attempts to ignore or suppress such thoughts or impulses or to neutralize them with some thought or action." A third change is that the definition of compulsions explicitly includes mental acts.

From our experience, detailed behavioral analysis will always identify that some part of a "pure obsession" or "rumination" plays a neutralizing role that is functionally equivalent to overt compulsions. That is, pure obsessions or ruminations are conceptualized as complex events that include both intrusive thoughts and responses to these obsessive thoughts in the same way that overt compulsive rituals are conceptualized as response to obsessions. In this sense, "pure obsessions" do not exist. However, these cognitive activities are not necessarily "cognitive rituals" or "mental compulsions" according to the usual definition of these terms. These issues are dealt with more fully in the section on neutralization below.

Despite the modifications in the *DSM-IV* definition, obsessions without overt compulsions are sometimes difficult to distinguish from other disorders, such as general anxiety disorder, hypochondriasis, and some atypical forms of agoraphobia. We have successfully treated people with obsessive fears of cancer, AIDS, and multiple sclerosis as well as bowel obsessions (obsessive fear of breaking wind), morbid jealousy, and existential concerns. Criteria that we have used in these frontier cases to determine whether this treatment is appropriate are (a) the presence of a high frequency of spontaneous intrusive thoughts (in some cases more than 100 a day) *or* ruminative thinking that may last several hours that is not restricted to depressive episodes and is not about daily concerns, and (b) extensive repertoires of cognitive neutralization (see below).

Overvalued Ideas, Poor Insight, and Delusions

One of the cardinal features of obsessions since the earliest psychiatric descriptions has been that the person can think rationally about their thoughts and thus see them as senseless (see Kozak & Foa, 1994, for a review). The *DSM-IV* field trial confirmed that a majority of people at seven sites expressed various degrees of uncertainty about the reasonable nature of their obsessions and compulsions (Foa & Kozak, 1995). In fact, *DSM-IV* explicitly recognizes a Poor Insight subtype of OCD. Note that the distinction between obsessive thoughts with poor insight and delusions is not always clear. The overvalued ideation sometimes found in OCD may be especially present when symptom levels are high. Although exposure may be difficult to implement initially when overvalued ideation is present, cognitive restructuring may provide a means of modifying strongly held beliefs so that exposure is acceptable, at least for items low in the hierarchy. Once exposure to low hierarchy items has produced some results, it may then be possible to move on to more difficult targets. Many people, at least at the start of treatment, may hold strong beliefs that the obsessions or the feared consequences have a basis of truth. They may agree that their thinking is overly time consuming, or prevents them from doing other things. Thus they may accept that it is excessive, but may still have trouble accepting that it is not true. It may take more than one interview to adequately distinguish strongly held obsessive beliefs from delusions. Self-monitoring may also be helpful.

From our experience, detailed behavioral analysis will always identify that some part of a "pure obsession" or "rumination" plays a neutralizing role that is functionally equivalent to overt compulsions.

Comorbidity

Before treatment it is important to establish that the obsessive disorder is not complicated by the existence of other Axis I or Axis II disorders. It is normal to expect a

degree of comorbidity; indeed, the recent cross-national epidemiological study showed lifetime median comorbidity rates for OCD of 27% for major depression and 52% for another anxiety disorder (Weissman et al., 1994). Figures may be even higher in clinical samples, especially for major depression (see Rasmussen & Eisen, 1992). In some cases cognitive-behavior therapy of obsessive thoughts should either be delayed or is contraindicated. For example, with comorbid panic disorder or posttraumatic stress disorder, it may be indicated to first treat the comorbid disorders because effective exposure to obsessive stimuli may otherwise be difficult. Likewise, severe depression may require treatment before targeting the obsessive thoughts (see also Riggs & Foa, 1993; Steketee, 1993). Our experience in treating people with obsessive thoughts is restricted to those with primary obsessive thoughts, but many had secondary depression and other anxiety disorders of lesser severity. Comorbid substance abuse or psychotic disorders present particular treatment problems whereby cognitive-behavioral treatment of obsessive thoughts may be contraindicated.

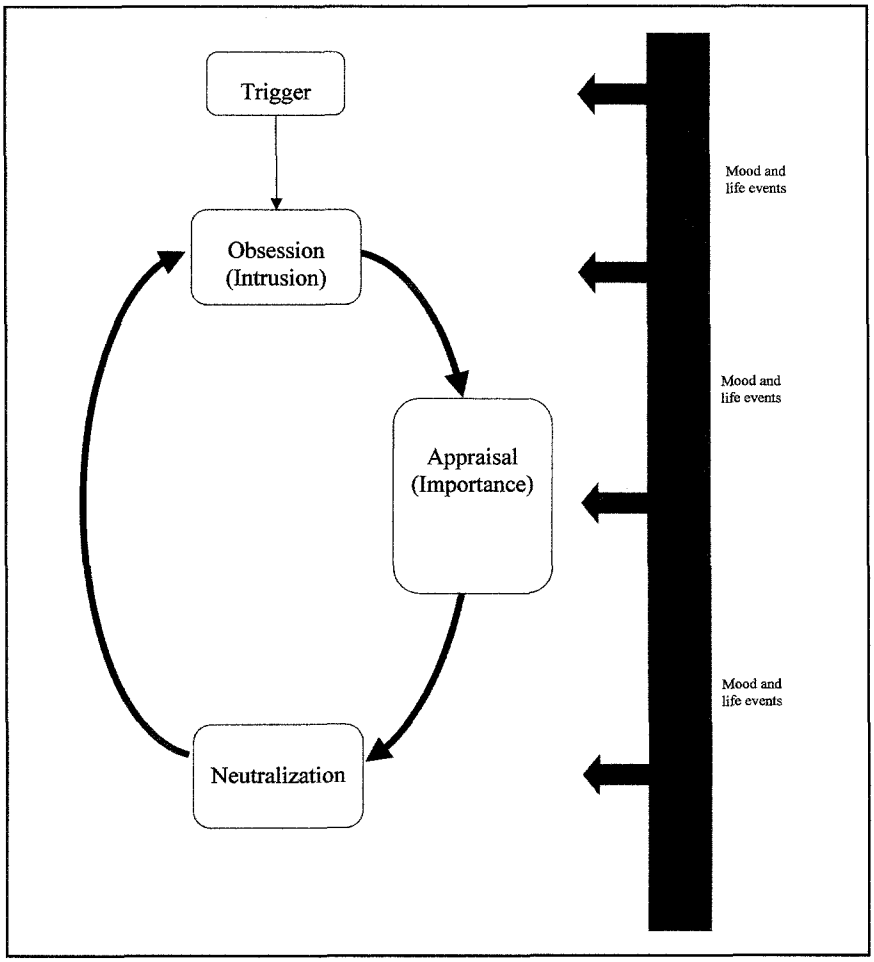

Figure 1. Cognitive model of obsessive thoughts.

There are no figures available for personality disorders among people with obsessive thoughts without overt compulsions. Although we have not formally assessed personality disorders, we have no reason to assume that people who report obsessive thoughts without overt compulsions will be different from the other samples of OCD reported in the literature. In many cases, personality traits and disorders simply add to the challenge of working with people with OCD. For example, the therapist must seek to develop autonomy in the therapy process among those who are prone to dependence on others. Longer follow-up and support may be necessary for people with a number of unstable interpersonal relationships who may be more prone to relapse. Severe personality disorders can interfere with treatment. However, there is no reason not to attempt to apply the treatment package to people with personality disorders, although the relative use of exposure and cognitive therapy techniques should be adjusted in consequence and appropriate treatment goals should be set. For example, exposure is probably not appropriate in cases of borderline personality unless the person's condition is relatively stable and the therapist can provide sufficient support during exposure. People who present schizotypal features may often fall into the "poor insight" category and cognitive restructuring may be needed before the person will accept exposure. Finally, exposure and response prevention would be contraindicated with antisocial personality disorder and harming or aggressive obsessions when the obsessions may appear ego-syntonic at times.

A Clinical Model of Obsessive Thoughts

The model presented in Figure 1 is a synthesis of earlier cognitive-behavioral models (e.g., Rachman & Hodgson, 1980; Salkovskis, 1985) and our own clinical and research experience with obsessions without overt compulsions. The advantage of this model is purely practical in this context: the model that we present in therapy is similar to the theoretical model. The theoretical justification of the model is presented in detail elsewhere (Freeston & Ladouceur, in press-a, in press-b, in press-c).

Obsessions

The themes reported commonly refer to aggression and loss of control, harming, negligence, dishonesty, accidents, sexuality,

religion, contamination, and illness. However, there are occasionally obsessions referring to minor ambiguities in everyday life (e.g., *Did I step on the crack, or just before, or just after?*), existential questions (e.g., *When does the spirit enter the body?*), and other otherwise apparently neutral thoughts. The thoughts may apparently be triggered by internal (e.g., mood, other thoughts, sensations) or external triggers (e.g., objects, situations, information, etc.), or they may occur spontaneously. In many cases, the individual may recognize the ego-dystonic, irrational, or excessive aspects of its content. But in some cases people are not convinced that the thoughts are irrational. As treatment progresses, people gradually recognize the senseless, nonrealistic, or excessive aspects of the thought.

Current accounts of OCD generally agree that the thought content as such is less important than the meaning that the person ascribes to it. This does not mean that the content and the person's implicit account of its origin be ignored. Rather, it means that the focus of treatment will be to show the person that the way in which the thought is interpreted contributes to the ongoing obsessive problem (see Rhéaume, Freeston, Léger, & Ladouceur, 1998). Thus, obsessions are conceptualized as internal events that are subject to further processing. They may occur spontaneously or be triggered by either external or internal stimuli. Internal stimuli include physical sensations, emotional states, and cognitive events, whereas external stimuli include objects, situations, and people.

Appraisal and Perception of Threat

In line with other cognitive models of anxiety (e.g., Beck & Emery, 1985; Clark, 1986), appraisal is a process by which the individual attaches meaning to the thought's content or its presence in terms of its value, its importance, or its implications. If the thought is adequately appraised (e.g., *This is a strange thought, but it doesn't mean anything*) in that the person treats the thought as a cognitive event that does not necessarily have any real-life referents, it is then judged as having little or no importance, no particular value, or no particular personal implications. In this case, no further processing will take place and no action such as neutralization, reassurance seeking, or avoidance will occur. On the other hand, if the thought is inadequately appraised as having negative implications for the individual (e.g., *This thought might mean that I really could attack someone*), then some type of further processing will occur. Through the process of appraisal, an intrusion will acquire personal significance and, in the case of negative appraisal, will result in the perception of threat of some kind. The threat may be immediate or future, may involve real danger or moral consequences, may be concrete or abstract, and may involve self or others. A number of different types of appraisal leading to the perception of threat and the beliefs driving the appraisals have been postulated. The reader is referred to these other sources for a full discussion (Freeston et al., 1996; Obsessive Compulsive Cognitions Working Group, 1997; Salkovskis, 1985, 1989a; Salkovskis, Richards, & Forrester, 1995; Salkovskis, Shafran, Rachman, & Freeston, 1999).

Neutralization

We believe that the key to the successful cognitive-behavioral treatment of obsessive thoughts with exposure and response prevention is to understand neutralization. Historically, cognitive rituals have been associated with obsessions without overt compulsions in the OCD literature and are considered to play the same role as overt rituals (Emmelkamp, 1987; Foa, Steketee, & Ozarow, 1985; Marks, 1987; Rachman, 1971, 1976; Salkovskis, 1985; Turner & Beidel, 1988). Our own clinical experience in treating a number of people with OCD without overt rituals first confronted us with the repertoire of activities that are available. We observed a few cognitive rituals meeting strict definitions for rituals emphasizing the stereotyped quality of the activity (e.g., Turner & Beidel, 1988). We also observed a number meeting Rachman's (1976) original definition of neutralizing as "attempts at putting right" or Salkovskis's (1989a) definition of "voluntarily initiated activity which is intended to have the effect of reducing the perceived responsibility" (p. 678). However, the vast majority of strategies seemed to fall within the group described by Rachman and de Silva (1978) as coping mechanisms in that they are actions that try simply to remove the thought or reduce discomfort without either the very stereotyped characteristic of rituals, or the obvious "putting right" or responsibility-reducing features alluded to by Rachman and Salkovskis.

Experience with both clinical populations and studies with the general population support the diversity and complexity of the responses to intrusive thoughts and obsessions (e.g., Freeston & Ladouceur, 1997b; Freeston, Ladouceur, Provencher, & Blais, 1989; Ladouceur et al., in press). The overall picture emerging from these and other studies suggests that most individuals use a variety of different responses to intrusive thoughts, including some form of self-reassurance, analyzing or thinking the thought through, seeking reassurance, replacing the thought with another, performing a mental or concrete action to remove the thought, using a distracting activity, distracting oneself with surroundings, and thought stopping. They may use different strategies with different thoughts and different strategies to deal with a given thought. The choice of a given strategy is not random. It seems to be determined by personal rules related to discriminative stimuli such as the intensity of the thought, its current appraisal, situation in which the thought oc-

curs, the use of other strategies previously, and mood state. There are specific links between appraisal of intrusions and some types of responses. At a superficial level there are more similarities than differences between strategies used by nonclinical subjects and those used by people with obsessions. The differences may be critical, for example, the particular "mix" of strategies, the degree of linkage between the thought's content and the strategy used, and the degree of repetition of the strategy. It seems that no strategy is consistently more efficient than another, although specific strategies may be relatively efficient for some people. Others report great variability in the efficiency of a given strategy. Although activities meeting the definition of "mental compulsions" were reported by some patients with obsessive thoughts, they all also used a wide range of strategies to deal with their thoughts, many of which did not meet the formal definition of a cognitive ritual.

Based on this knowledge, we have adopted a very wide definition of neutralization: Neutralization is defined as a voluntary and effortful attempt to remove, control, prevent, or attenuate the thought or the associated discomfort, or to change the thought's meaning. This definition includes cognitive rituals, neutralization in the Rachman and Salkovskis sense of the word, and coping strategies. Many forms of neutralization may not meet the *DSM-IV* definition of a cognitive compulsion in that they may not be repetitive, "driven to perform . . . or according to rules" (p. 423). This does not prevent a diagnosis of OCD as the various forms of neutralization are attempts to ignore, suppress, or neutralize thoughts as stipulated by the *DSM-IV* criteria for obsessions. When neutralization is broadly defined, the maintenance of obsessive thoughts may be more easily conceptualized, and assessment and treatment targets follow logically.

Neutralization is defined as a voluntary and effortful attempt to remove, control, prevent, or attenuate the thought or the associated discomfort, or to change the thought's meaning.

The question has been raised more than once that under this definition, useful therapeutic strategies then become forms of neutralization because they seek to modify the thought's presence or meaning. In a literal sense this may be true. However, neutralization is seen as an activity that is contingent on the thought's presence or likely presence with the *immediate* goal of removing, controlling, preventing, and so on. Therapeutic strategies such as cognitive restructuring are always used well before or well after the occurrence of the thought, but never when it has just occurred. Successful cognitive restructuring leads to the conclusion that when the thought occurs, one should do nothing to remove it or change its meaning. Likewise, the immediate goal of exposure and response prevention is to ensure the thought's presence and then do nothing. The *ultimate* goal of therapy is obviously to eventually decrease the frequency and intensity of thoughts, reduce distress, and change the thought's meaning. The *immediate* goal of the therapeutic technique is to enable the person to be able to experience thoughts, to not attach importance to them, and to do nothing that is voluntary or effortful (i.e., not neutralize). A more restrictive definition of neutralization may be more elegant but may be so at the cost of weakening a definition that is clinically useful. By maintaining an all-inclusive definition, the therapist and client are less likely to overlook clinically significant but possibly subtle forms of neutralization.

Mood and Life Events

There is some evidence that mood and life events, either individually or in concert, can influence the severity of OCD (Freeston & Ladouceur, in press-c). We suggest that mood will influence the frequency and intensity of obsessions, the nature and the intensity of the appraisals, and the choice and efficacy of the attempted neutralization. Understanding the role of mood and life events helps people gain a perception of control over the problem, can help understand changes during therapy, and is important in response prevention.

Assessment

A number of questionnaires have proven useful in the assessment for the treatment of obsessive thoughts. As well as calculating total scores for questionnaire measures, it is important to follow up with specific questions about symptoms, appraisals, and beliefs. Items with extreme ratings, or unexpectedly high or low ratings (i.e., when a checked item is in disagreement with interview data or the clinician's working hypotheses), should be investigated to see what the person has tried to indicate by the rating.

Symptom Measures

We recommend the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS; Goodman et al., 1989) as a clinician rating scale. The symptom checklist preceding the Y-BOCS is particularly helpful in providing an overall picture of current and previous obsessive-compulsive symptomatology. We applied the questions on compulsions to the neutralizing behaviors identified in the Structured Interview

on Neutralization (see below). For general OCD and related symptoms, we recommend the Padua Inventory (Sanavio, 1988), the Beck Depression Inventory, and Beck Anxiety Inventory (Beck, Epstein, Brown, & Steer, 1988; Beck, Rush, Shaw, & Emery, 1979).

Cognitive Assessment

A number of questionnaires may be useful. We have used the Cognitive Intrusions Questionnaire (CIQ; Freeston, Ladouceur, Thibodeau, & Gagnon, 1991; Freeston & Ladouceur, 1993), a highly specific measure of the formal characteristics of the most troublesome thought, reactions to the thought, and appraisal of the thought. Its utility is to identify key dimensions (e.g., disapproval, responsibility, guilt, probability, etc.) and to monitor change over treatment for a given target thought. Single items are better than summary scores and enable a semi-idiographic approach to assessment where the personally relevant items are tracked for each person.

Other instruments measure related cognitions: the Interpretation of Intrusive Thoughts (IIT; Freeston & Ladouceur, 1997b) is a checklist of typical appraisals or interpretations reported by people with obsessive thoughts. The Inventory of Beliefs Related to Obsessions (IBRO; Freeston, Ladouceur, Gagnon, & Thibodeau, 1993) is a 20-item measure of dysfunctional beliefs related to obsessive thoughts. Instruments currently under development by the Obsessive-Compulsive Cognitions Working Group (1997) will ultimately replace these two instruments.

Structured Interview on Neutralization. The Structured Interview on Neutralization (Freeston, Ladouceur, et al., 1995) assesses strategies used to counter the most troublesome thought identified in the CIQ as the target thought. Subjects are asked to form the thought clearly at the start of the interview. The interviewer then uses 10 probe questions to elicit examples of strategies. Subquestioning continues until operational descriptions are obtained and further similar examples are sought. Once the repertoire has been established, each strategy is then analyzed according to a series of parameters. The probe questions are most useful in a clinical setting and may be used alone. The additional questions enable a more complete portrait of the complexity and variability in the repertoire and may better prepare the therapist for implementing response prevention.

Self-monitoring diary. Discomfort is often the easiest variable to use for self-monitoring: Some subjects may report only two or three thoughts per day, but engage in several hours of rumination consisting of chains of intrusions and neutralizing strategies, whereas other subjects report literally hundreds of brief "flashes" that last a few seconds at most and are difficult to count. Frequency and duration of intrusive thoughts are highly variable among the general population as well. A normal response (i.e., little discomfort) to obsessions seems a more obvious outcome variable until clear target parameters are established for frequency and duration.

Daily self-monitoring is conducted throughout treatment. It is important to make sure that people use the scales in a realistic way so that the maximum score is defined as the worst that symptoms have been in the last month, and not the worst that they have ever been. Compared to other people with OCD with overt compulsions, a sizable proportion of those with obsessive thoughts only report wildly fluctuating symptom levels over quite short periods of time. Large fluctuations do not necessarily mean measurement problems, although this hypothesis should be considered. With some people, it has been useful to measure mood and life events to find out the possible determinants of the fluctuations in the intensity of obsessions. Knowing what factors influence the thoughts helps reframe the obsessive thoughts as an explicable psychological phenomena. Such information is also very useful in relapse prevention.

Conducting Exposure and Response Prevention

Treatment Characteristics

The goal of the treatment is to change the person's understanding of obsessions, prevent neutralization, and thus enable patients to change their interpretation and habituate to the obsessive thoughts. Frequency, duration, and distress will then decrease. The specific objectives are:

- to provide an adequate explanation of obsessions;
- to enable the person to understand the role of neutralization in the maintenance of obsessive thoughts;
- to prepare the client for exposure to the thoughts and to the situations which trigger the obsessions;
- to correct, when necessary, the overestimation of the importance of thoughts;
- to expose the client to the thoughts and to implement response prevention (i.e., stop neutralizing activity);
- to correct, when present, the exaggeration of specific feared consequences associated with the thought;
- to correct, when present, exaggerated responsibility and perfectionism;
- to make the person aware of situations in which he or she is more vulnerable;
- to prepare the strategies to use when relapse occurs.

The program is standardized in that each person receives all treatment components. It is individualized in that the type of exposure, the targets for response prevention, and the targets for cognitive correction will

vary according to the individual characteristics of each person.

The format that we used to deliver the treatment in the controlled study was based on one-and-a-half-hour sessions for the first two-thirds of therapy. There were normally three to four assessment sessions followed by two sessions a week until exposure to target thoughts and response prevention was mastered. Session length and frequency decreased in the later part of therapy with gradual fade-out. Patients typically received 4 to 5 months of treatment with 2 to 3 months at two sessions a week. With increased experience, we have been able to shorten sessions and decrease frequency of sessions. Current research protocols are testing 1 hour a week for 16 weeks. In private practice, it may still be useful in the initial exposure sessions to see patients more than once a week, but telephone contact may often be able to replace additional sessions.

Therapist Attitudes

It is very important that the therapist show confidence in the treatment without underestimating the difficulties facing the person. The therapist emphasizes the importance of working together while learning and applying the therapeutic strategies. The great majority of people who consult with OCD have already consulted several mental health professionals and have normally been given a number of different explanations. They are also likely to have received contradictory or even counterproductive advice (e.g., "Try not to think about it"). Thus, it is important that the therapist emphasize the specific aspects of the treatment package. The goal of the treatment is to develop a new understanding of obsessions that will allow a new way of reacting to the thought that ultimately leads to a reduction in the intensity, duration, and frequency of the thoughts and the distress that they cause. The treatment leads to a great deal of improvement in the majority of people and allows them to live more fully in various spheres of their lives.

Even though the therapist is the expert in the treatment of obsessions, each individual is the expert about his or her own symptoms. The therapist tries to enable each person to draw their own conclusions when making the connection between the information provided by the therapist and their own experience. Thus, the therapist style sought is the Socratic dialogue (see Beck et al., 1979) or the "Columbo" role described by Meichenbaum (1985), where the person "discovers" the connection just before the therapist points it out.

All exposure therapies require a great deal of motivation and courage by the person. It is important that the therapist listen to the person's concerns and respond to them appropriately with empathy and accurate answers, but without being diverted from the treatment goals. At each step the therapist ensures that the person understands what is to be done and why. However, given the tendency to make repeated requests for reassurance, the therapist must be aware of the neutralizing effect of repeating answers. It is important to provide new information and to check that the information is well understood, but it is very important not to repeat the same information several times. The therapist must be ready to refuse to answer certain types of questions that may be asked in a variety of different forms. In this case the therapist must reframe the question as reassurance seeking, which is a form of neutralization, and come to an agreement with the person to not answer these questions.

The therapist must develop a relationship of trust but must remain firm. It is important to establish a clear contract for the duration of the treatment but also specific contracts when faced with new exposure situations. The therapist should not be dissuaded by the person's avoidance behavior but should analyze the avoided situation for any relevant information that may have been overlooked (e.g., specific beliefs or internal or external stimuli that increase the thought's salience). The therapist must be ready to confront the person when exposure goals previously established by both client and therapist are not respected. In exposure situations, the therapist must be ready to adapt the exercise, for example, by more progressive exposure or by correcting beliefs that may prevent the person from functional exposure, but the therapist must not accept avoidance. The therapist should explain that the therapy cannot work if avoidance continues. If necessary, the therapy can be suspended until the person is ready to follow the therapist's recommendations (see Caire, 1991; Persons, 1993).

When working with people with perfectionistic attitudes, negotiating the fine line between flexible and realistic attitudes to performance and implicit tolerance of avoidance behavior can be tricky and should be addressed explicitly. Some people set increasingly (and impossibly) high treatment outcome goals such as the absence and continuing absence of any obsessive thought. Once again, it is important to review the model and show the impossibility of such a goal.

Assessment Sessions

Once a diagnosis has been established, assessment typically takes two to three sessions. The first session normally addresses major symptoms identifying obsessive thoughts, neutralizing responses, and situations that are avoided. The Y-BOCS may be useful here, and the BAI, BDI, and Padua Inventory may be given as a homework task to complete a general portrait of the principal and associated symptoms.

The second session may be used for general history taking, such as onset and course of the disorder, previous

treatment (psychological or pharmacological), exacerbations with stress, social functioning, and knowledge about OCD. The cognitive questionnaires (CIQ, IBRO) may be given as a homework task. The third session can focus on the strategies with the Structured Interview on Neutralization and on some aspects of appraisal using the IIT. Behavioral assessment must be conducted on a continuing basis because some forms of neutralization will only be identified when the person is placed in particular contexts or with specific triggers. Thus, in addition to initial assessment, it is important to question about neutralization during initial exposure sessions or behavioral experiments, and later with naturally occurring thoughts.

As many of the responses have become automatic, one way of helping the person to identify the automatic but fundamentally voluntary response is to direct attention toward internal states such as anxiety or guilt. Any event or action that has the effect of reducing anxiety or guilt, by even a little, is then identified as a voluntary neutralizing response. Self-monitoring the efficacy of neutralizing strategies for a week or more may also be useful and may highlight the hit-and-miss nature of many neutralizing strategies.

Self-monitoring should be introduced as soon as possible, for example, once target symptoms have been identified. Some clients are apprehensive about self-monitoring and believe that their obsessions will increase, although it rarely occurs. It is important to establish the advantages of self-monitoring for the successful application of the treatment; for instance, discovering what factors may be causing fluctuations in symptom severity can help in relapse prevention. It also helps identify when the therapy is working and why, and when it is not working and why not.

First Intervention Session

In all sessions the therapist first sets the agenda for the session and looks at the self-monitoring and any other task that was assigned to the person. This does not mean simply checking that it has been done; the therapist follows up any interesting leads but avoids becoming side tracked. Looking at homework reports increases the information available to the therapist and also shows the person the importance of the assigned tasks. The first session has two main goals: to establish the therapeutic contract and to provide a model of obsessive thoughts that will be used throughout the treatment.

Establish the Therapeutic Contract

The therapist states that he or she will explain each step of the treatment in full, and to answer all valid questions. When the person understands, it is easier to actively participate in the process and adopt a problem-solving approach. The client and the therapist will plan each exercise together. For example, when planning exposure targets, the person must indicate whether he or she is likely to be able to complete the exercise and to suggest changes to make the exercise more personally relevant. The therapist will strongly encourage the person to complete exercises and remind the person of existing agreements, but will never force the person to do things against his or her will. The therapist will seek feedback from the person. Reports on homework tasks must be honest so that adjustments can be made for any difficulties that might arise.

Establishing the Treatment Model

The model that is presented to the person is adapted according to the person's sophistication. In all cases the model is illustrated with the person's own obsessions, appraisals and beliefs, neutralization strategies, etc.

Intrusive thoughts. The first step is to provide an account of intrusive thoughts.

> "Unpleasant intrusive thoughts occur in about 99% of the population. Unpleasant thoughts of thousands of people, of all ages and occupations, have been studied, and several common themes have been found. They typically concern sexuality, religion, harm, disease, contamination, aggression, mistakes, and dishonesty, but may also involve order, symmetry, and minor unimportant details. The thoughts often seem to come out of nowhere, although they may be triggered by specific situations. For example, thoughts about harming people may be triggered by seeing a large knife or by the presence of the person who might be attacked."

At this point, the therapist can give the person a list of thoughts reported by the general population and invite the person to read the list. The list reported by Rachman and de Silva (1978) is appropriate. The therapist then helps the person make the connection between the person's own thoughts and thoughts reported by the population in general. The goal is to establish that thoughts reported by people with OCD do not differ from thoughts reported by the general population in terms of content.

> "There are very few differences in the content of the thoughts reported by the general population and those reported by people who consult for their obsessive thoughts. The differences lie in the frequency of the thoughts, the discomfort, the duration, the importance that the person attaches to the thoughts, and the effort that the person uses to deal with the thoughts. Strange intrusive thoughts are a normal experience until they become prob-

lematic (in about 2% of the population) and are then called obsessions. As it is normal to have some unpleasant thoughts, the goal of the therapy is not to eliminate the thoughts because this would make you different from everybody else. The goal is to change your reactions to the thoughts by changing the importance that you attach to the thoughts, to change the strategies that you use. Then the duration of the thoughts will decrease, together with the discomfort, and finally the frequency. The thoughts will become much less frequent and less disturbing and you will be able to handle any remaining thoughts without becoming upset when they occasionally come to mind."

At this point, patients often ask, "Why do I have this type of thought?" At the moment, we do not have totally convincing answers to this question. However, one explanation (based on Salkovskis, 1989b) has proven satisfactory:

"We need the ability to have spontaneous thoughts in order to be able to solve problems and to be creative. This way, we may know how to act in a new situation or imagine new ideas or invent something new. Thus, we need a thought generator that can give us new ideas. However, this thought generator may also give us other types of thoughts, and we believe that these unpleasant thoughts also result from the idea generator. We also have an in-built ability to anticipate, notice, or react to danger in useful ways. The danger detection system is there to protect us: This is the role of anxiety. For a number of different reasons, the idea generator and the danger detection system seem to be more strongly associated in some people. In others, the danger detection system seems to overreact by acting as though there is a tiger waiting around the corner all the time when in fact it is only a kitten. It appears that once the obsessive spiral gets going, it can keep going by itself—things that people do to help themselves may often contribute to maintaining the problem. Whatever the exact reasons, we know that we can learn to make the idea generator and the danger detection system react more appropriately so that the useful features remain while the overactive features associated with obsessions decrease greatly."

Some people are aware of the biological or genetic hypotheses of OCD or have heard about links with schizophrenia and may ask questions. Some useful answers to these question are provided below.

"The fact that there are drugs that seem to have specific effects on obsessions certainly suggests that there is a physiological basis to obsessions in some people. Although some people respond a great deal to these drugs, others respond little, so it may not be the same in everyone. Further, recent technology suggests that the brain activity that is changed by these drugs is also changed by cognitive-behavior therapy, so both may end up having similar effects.

"Some studies do suggest that there is a genetic basis for OCD, at least for some people. However, there are many people who probably have the genetic vulnerability to OCD who never develop the disorder, and some develop the disorder without having the genetic vulnerability. Even if the vulnerability exists, this does not stop cognitive-behavior therapy from being effective and does not affect the long-term outlook. One of the things that you will learn during therapy is when you are vulnerable and how to deal with these moments.

"There is no evidence to show that outpatients with obsessions are more likely to develop schizophrenia than the population in general. Some of the earlier reports of a strong association probably resulted from confusion about the symptoms. Likewise, there is no evidence that people with OCD are more likely to be violent or dangerous than the population in general, despite common fears among people with OCD that they really are dangerous."

Appraisal. The next step in the model is the importance that the person attaches to the thoughts. Although this is technically referred to as appraisal, our experience suggests that "the importance given to the thoughts," or something similar, is a more accessible term.

"The reason why the same type of unpleasant thoughts causes a great deal of upset for some people, but not for others, is due to how the person interprets the thoughts or how much importance the person attaches to the thought. It is no coincidence that we typically see harming obsessions among gentle people, religious obsessions among religious people, distressing sexual thoughts among highly moral people, and thoughts about mistakes among careful people. The more important something is, the worse it seems to have a bad thought about it."

Here the information obtained during assessment may be used. There may be several interpretations present at any given time, or the most important interpretation may vary as a function of the situation, the mood state, etc. Some examples are:

- Thinking about this means that it's true;
- Thinking about it may make it happen;

- Thinking about it is as bad as making it happen;
- Having this thought means that I'm going crazy;
- If I think about something and don't do anything, I will be responsible if anything happens;
- If I start thinking about this thought I will be unable to stop;
- If I start thinking about this thought I will become very anxious and may _____;
- Having this thought means that I'm a bad person;
- Having this thought means that I'm not like other people.

This is an ideal point to continue the behavioral analysis of the types of interpretation that people might make. It is not necessary at this point to confront these interpretations. It is more important to establish some personally relevant examples that can be used to illustrate the model. It can be useful to point out that some interpretations deal with the thought's presence whereas others are based on the thought's content. Either type of interpretation can be equally upsetting.

Neutralization. The next step in the model is the idea of neutralization.

> "When someone attaches a great deal of importance to the thoughts, either its presence or its content, and concludes that the thought is negative, dangerous, or unacceptable, it is then normal to want to try to remove the thought, control the thought, or resolve it in one way or another. This is what we call neutralization. To give you an example we will do a short experiment. First close your eyes and try to think about a camel for 2 minutes. Each time that the camel disappears from your mind, indicate by lifting your finger. [The therapist records the number of times that the person loses the thought.] How was that? Was it easy to keep the camel in mind? Now we will change things around. Close your eyes and try *not* to think about a camel for 2 minutes. Lift your finger each time that the thought appears. [The therapist records the number of times that the person loses the thought.] What happened? Was it difficult to keep the thought away? What do these experiments tell you about trying to control our thoughts? Imagine what would happen if you had to do that for 20 minutes or 2 hours. Imagine what would happen if you had to pay me $100 each time the thought occurred. At the best you would lose a couple of hundred dollars and at the worst you would lose your life savings. Even if you succeed partially in the short term, imagine how hard it will be to maintain the effort. Imagine how tired you would become."

In all cases that we have seen, with both clinical and nonclinical subjects, keeping the thought present is difficult, and keeping the thought away totally is impossible! The therapist, by inviting the person to comment on the experiment, leads the person to conclude that our mental control, even for images or ideas that have no particular meaning, is much less than perfect. Even more important, the more that we try not to think about something, the more the thought comes to mind. It may be useful to suggest that the person tries the same experiment with someone else who does not have obsessions. Most people spontaneously make the link between this experiment and their own obsessions. The therapist can then formally define neutralization.

> "All the strategies, which in the beginning may be very logical, eventually become part of the problem. All efforts to control, remove, or avoid the thoughts or change its meaning are forms of what we call neutralization. [Particular examples from the person's repertoire established during the structured interview are then added to the model.] How many different strategies have you tried? How many have worked? How many worked at first but worked less with time? How many work all of the time? How many work just sometimes?"

Because neutralization works partially or for a short while, or may even work completely once in a while, people tend to keep on neutralizing because it still looks as if it might work if they just try a littlte bit harder or can get it just right.

Summary of the basic model. The basic model has now been established and may be stated as follows:

> "Obsessions may be thought of as a vicious circle where thoughts may be either triggered or occur spontaneously. You attach a particular importance to the thoughts that leads to upset. You try to remove them or control them, but the thoughts come back. Even worse, each time you neutralize them you reinforce the importance that you give to the thoughts: After all, why would you go to all this trouble if the thoughts were not important? Because neutralization works partially or for a short while, or may even work completely once in a while, people tend to keep on neutralizing because it still looks as if it might work if they just try a little bit harder or can get it just right."

At this point, the critical distinction is made between the voluntary part of the model and the involuntary part

of the model. The obsessive thought and the "camel effect" are both considered involuntary, whereas the importance attached to the thought and the neutralization are considered voluntary.

"It is important to note that there are two parts of the model that are not under your control: the occurrence of the thoughts and the camel effect. We call these involuntary because they happen in everyone, regardless of whether they suffer from obsessions or not. There are two parts that are potentially under control: the importance that you give to the thought, and the neutralization strategies that you use. We call these voluntary because they are controllable, even though in all likelihood they have become highly automatic. A good example to illustrate how something voluntary can be automatic is to think about changing gears when learning to drive a car with a manual transmission. In the beginning, the driving instructor tells the learner driver how to change gear. After that, the drivers, in all probability, talk to themselves while changing gear. Next, drivers stop talking, but their lips keep moving. Then, the lips stop moving but they still have to think consciously about it and eventually they no longer have to think about how exactly to change gear, they just do it. It is something that was once under complete voluntary control but is now highly automatic.

"Given that some parts of the model are voluntary and some are not, where do you think it would be useful to start to change things? [With a little bit of prompting, the person is led to establish that the two voluntary parts of the model, namely the importance to the thoughts and the neutralization, are the places where modification is possible.] So, the logical things to change will be the importance given to the thought and the neutralization. With a car, it can be quite difficult initially when changing cars or going from a manual to an automatic car to lose the automatic reflexes. But with a little bit of effort and a little bit of time, a new automatic way of doing things can become established. It is the same with obsessions: It takes some effort and a period of adaptation to change the importance given to the thought and the neutralization strategies used. At the moment it might seem impossible to change. The goal of the therapy is to gradually enable you to change your automatic reflexes of attaching too much importance to the thought and neutralizing."

Session Summary

There are five critical points that the therapist must ensure that the person has understood during the session.

1. Unpleasant thoughts are experienced by almost everybody. They are involuntary and unwanted. Some people are more disturbed by these thoughts than others.
2. People who are troubled by their thoughts are troubled because they interpret them in particular ways and attach a great deal of importance to the thought's presence or content.
3. If a person attaches a great deal of importance, it then becomes logical to try and do something about the thought. All these strategies, whether reassurance seeking, cognitive rituals, overt compulsions, talking to oneself, distraction, or avoidance are considered different forms of neutralization. Even though they may be efficient in the short term, they are inefficient in the long term.
4. Through the so-called "camel effect," attempts to remove or suppress the thought are unsuccessful and may result in the return of the thought.
5. The occurrence of the obsessive thoughts and the camel effect are involuntary phenomena over which the person has no control. On the other hand, the importance given to the thought and neutralization strategies are voluntary actions that are potentially under the person's control. The goal of the therapy is to change the importance given to the thoughts and the strategies used when the thought occurs, and thus decrease the distress caused by the thought, its frequency and duration.

The person is invited to summarize the principal points of the model as a homework task or to copy out the model that has been drawn during the session. Any questions that arise are noted and to be brought to the next session. The person can also be asked to note the types of interpretation or importance given to the thought.

Second and Third Intervention Sessions

The goal of the second treatment session is to check that the model is understood, add any further details, and prepare the person for exposure and response prevention. Now that the basic model has been fully understood, other factors may be added according to the relevance for the person and the person's degree of sophistication.

Role of Anxiety

The therapist explains the role that anxiety plays in maintaining thoughts. Some people report frustration, guilt, discomfort, or even sadness as predominant emotions. In these cases the same information can be presented with reference to the emotion named by the person.

"When the thought is given a lot of importance in terms of danger or harm, it is normal that anxiety increases. Anxiety is an unpleasant experience and it is normal that people try to do something with the thought to decrease the anxiety. Neutralization sometimes works or at least may lead to a temporary and partial reduction in anxiety. Because it brings some relief, the reduction in discomfort increases the probability of neutralizing again (by negative reinforcement). However, some anxiety remains, and as anxiety worsens, the frequency of the thought also increases.

"Although it is normal to want to avoid or to decrease anxiety, neutralizing means that because of the 'camel effect' the thought will come back and you strengthen the importance attached to the thoughts. Not only will anxiety be experienced again, but also with a sense of losing control, the anxiety is often worse on each subsequent occasion. This is a bit like playing Monopoly; every time you pass go you collect another $200!"

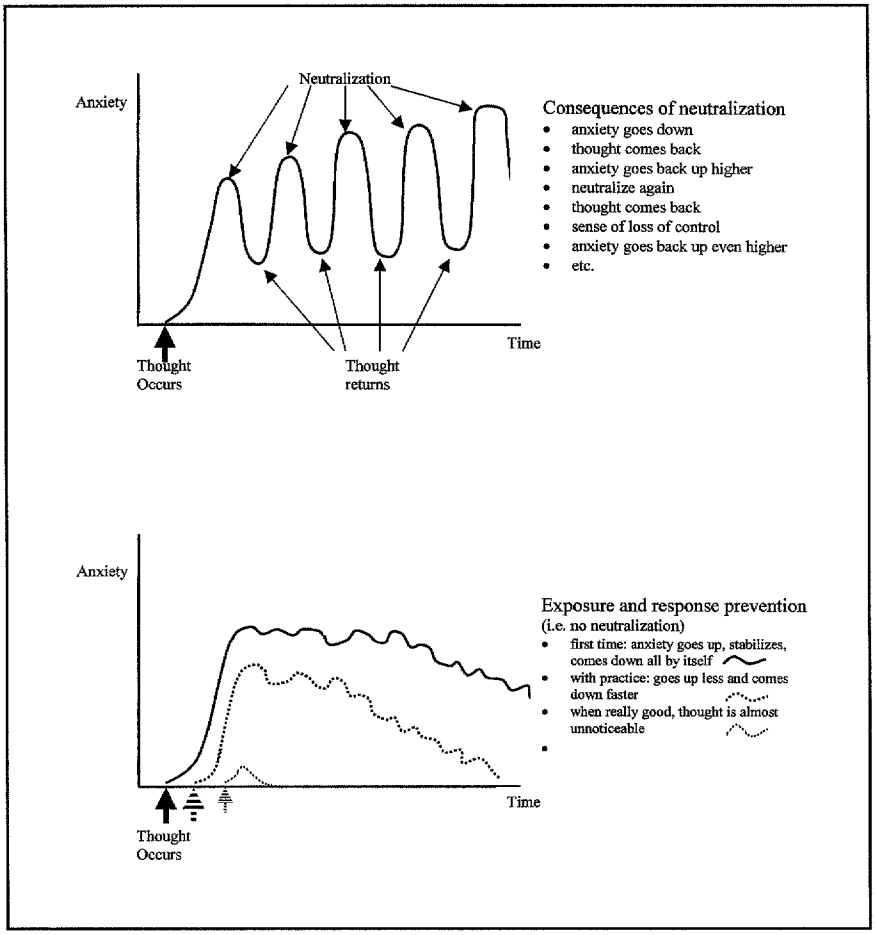

Figure 2. Neutralization and exposure curves.

The therapist can then show an anxiety curve for neutralization and contrast it with a habituation curve resulting from exposure (see Figure 2).

"See how anxiety increases following the obsessive thought and decreases partially following neutralization, only to increase again with the next thought and go even higher! On the other hand, there is a natural habituation curve for anxiety which involves a first increasing phase, a second plateau phase, then a third decreasing phase. This type of curve has been studied in thousands of people with all types of anxiety, including the anxiety associated with obsessions. Thus, if we neutralize, we can never learn that anxiety will decrease by itself, even if we do nothing."

Some people have beliefs or expectations about the consequences of high levels of anxiety. For people with comorbid panic disorder or previous experience of panic attacks, or people with obsessions about loss of control (e.g., harming obsessions), such beliefs may prevent the client from functional exposure due to fear of the accompanying anxiety. Many of the beliefs about loss of control are common to both panic disorder and certain types of aggressive obsessions. Likewise, people may fear that high levels of anxiety may lead to depression or other forms of mental illness. The therapist provides basic information and distinguishes between anxiety as an unpleasant experience and anxiety as a dangerous experience. In some cases where such beliefs would prevent exposure, techniques used for the treatment of panic disorder may be used first.

The Role of Magical Thinking

Magical thinking occurs when a person believes thinking can cause events to occur or that doing something (i.e., neutralizing) can stop a negative consequence from actually occurring. It is difficult to conduct exposure before the beliefs underlying this type of thinking have been challenged. Consider, for example, an obsession of a horrific image of a loved one dying in an accident. The individual interprets this thought as meaning *If I have this thought, the person will die.* The neutralization could be, for example, forming an image of the person living five times in a row. If the person has succeeded in

forming the image five times, and the loved one does not die, then the fact that no one died is attributed to forming the image five times.

> "Some people with OCD engage in what we call magical thinking. With this type of thinking, people believe to varying degrees that doing something (i.e., neutralizing) can stop something bad from actually happening even though there is no realistic causal link between the action and the feared event. When the bad thing does not happen, it is easy to believe that nothing happened *because* of the neutralization, even though nothing would have happened anyway. Neutralizing under these circumstances not only causes more obsessions by the 'camel effect' but also increases the likelihood of neutralizing next time (by negative reinforcement) because it seems to have really worked."

At this point, it may be difficult for the person to accept that this is true. However, it is important to establish the difference between the *belief* and the *fear* that there is a causal link between having the thought and the negative outcome. It may be useful to establish that there are two possibilities, even though there is no need at the moment to agree as to which possibility is correct. The first states, as the person believes, that the obsessions are an indication of real danger and that neutralizing can really prevent the negative outcome. The other possibility is that the obsessions are thoughts that are interpreted as indicating real danger when in fact they, and the beliefs and neutralizing strategies, are a symptom of an anxiety disorder. (See Freeston et al., 1996, for cognitive restructuring strategies that may be used for this type of thinking.)

Avoidance

Although in most cases neutralizing means doing something active to try to deal with the thought, many people use passive avoidance in varying degrees to try to control the thought's occurrence. Avoidance can be directed at situations, activities, sources of information, places, or people that may trigger the thought or that may be associated with the appraisal that the thought would be more dangerous if it were to occur in this situation. For example, a person with aggressive thoughts may avoid being alone with someone perceived as vulnerable, may cut vegetables such as carrots or potatoes with a very small blunt knife, may keep all screwdrivers locked up in the toolbox, and may avoid watching films or news reports about psychopaths and serial killers. Avoidance maintains obsessions by (a) adding to the importance attached to the thought; (b) increasing the range of potential stimuli; (c) maintaining the importance given to the thoughts (by the efforts expended in trying to avoid triggering the thought); and (d) preventing the person from learning that the thoughts and anxiety triggered by the stimuli will in fact decrease even when confronted without neutralizing on a regular basis.

> "Another form of neutralizing is what we call avoidance. In this case, it is *not doing something* that enables you to either limit the number of thoughts, or to limit the importance that you attached to the thoughts by avoiding certain types of triggers. These triggers might be people (a small child), situations (church), objects (knives), information (reading or hearing about mental illness), internal sensations or emotional states (anger), or other thoughts (thinking about someone's suicide). However, avoiding triggers makes you attach just as much importance to the thought because of the efforts taken to avoid. You cannot learn that thoughts are only thoughts and that you are able to deal with them. At the same time, the importance attached to particular triggers leads to increased scanning of the environment for other potential triggers. With time, there are more and more potential triggers that must be detected and avoided, leading to more and more restrictions in your movement and actions. Because you are never properly in contact with the thoughts, you can never learn that the anxiety will eventually go away by itself. Further, you cannot learn that what you fear may happen because of the thoughts is no more or no less likely to occur, regardless of whether you have the thoughts or not."

Reassurance Seeking

Many people with obsessive thoughts without overt compulsions engage in some degree of reassurance seeking. If the reassurance seeking is very frequent, stereotyped, or repetitive, it would be conventionally recognized as an overt compulsion. However, reassurance seeking may be subtle and/or infrequent. In fact, even very low-frequency reassurance seeking can play an important maintaining role because the memory of the reassurance (and in some cases even the anticipation of future reassurance) may be used to neutralize. Information obtained through reassurance seeking or even the reassuring act (i.e., the person's words, manner, expression, etc.) may be used repeatedly for neutralization. It may be necessary to explicitly make the link between certain features of reassurance seeking and other forms of neutralization, for example, the temporary effect, the need to repeat the demand, and the variability in the efficacy of reassurance.

> "Reassurance seeking is another form of neutralization that works by temporarily changing the impor-

tance that you attach to the thought. Although it may work for a short time, it is never successful in the long term. Because reassurance is very specific in time and to the particular situation, the smallest change in the situation or the smallest doubt as to the adequacy of the description of the situation will undo its effectiveness. Furthermore, if the person providing reassurance is not completely categorical, the effect of reassurance is undone. At the same time, reassurance seeking increases the importance given to the thought because of the attention that the thought has received. Reassurance demands normally increase over time: Each new doubt needs reassuring, and the answers given only generate more doubts. Finally, as for other forms of neutralization and avoidance, seeking reassurance from another person stops you from learning to look closely at your thoughts and from learning that the anxiety will eventually decrease by itself."

Exposure

Preparing the person. The model has now been fully established and illustrated with examples from the person's own repertoire of thoughts, interpretations, and strategies. It is now shown that to break the vicious circle, the person must learn to tolerate the thought. This involves deliberately thinking the thought (exposure) without neutralizing (response prevention). When this has been achieved, anxiety will decrease, the importance given to the thought will decrease, any feared consequences will either happen or not happen with exactly the same objective probability as before, and the thoughts will gradually decrease in intensity, duration, and frequency.

It must be remembered that people are normally looking for another trick, another strategy, or a new way of removing obsessions when they enter therapy. Thus, exposure and response prevention may seem counterintuitive. Here, an image (such as this one borrowed from Acceptance and Commitment Therapy; see Hayes, Wilson, & Strosahl, 1999) may be useful.

"Neutralizing is like trying to dig your way out of a hole with a shovel. You don't need a better shovel, you need a new way of looking at the problem. Over the last X years, how many strategies have you tried? How many worked the first time but gradually became ineffective? What is likely to happen if I find another 'trick' a bit like all the other ones that you have found yourself? What we are going to do now is learn how to put down the shovel, to learn how to stop neutralizing."

At this point, it may be useful to use an example to illustrate the principle of progressive exposure. For example, how the person would help a child to overcome a fear (e.g., of dogs), or how the person has already overcome a fear in the past.

"So you would gradually encourage the child to get closer to a dog? Would you start with a big dog or a noisy dog? Or would you start with a medium-sized quiet dog? Would you send the child to meet the dog alone?

"What do you think would happen if you had to make a speech everyday for a month? Would you still be as afraid? Would you start with a group of a hundred or would you start with a smaller group? Would you start by talking about something you know well or would you start with something that you knew little about?"

The method described by the person can then be reformulated in terms of exposure. The therapist can then show that obsessions are like having a phobia to one's own ideas and that the same methods of treatment can be applied—confronting thoughts or situations progressively, learning to tolerate the thoughts and anxiety at each level, and progressively learning that these thoughts are not important. However, people often have difficulty imagining that they will ever be able to confront their worst fears and may feel daunted by the prospect.

"Doing exposure is a bit like going up 10 flights of stairs. When you are at the bottom there are maybe 200 stairs to climb—that might be too much to tackle at once. However, you can probably climb 20 stairs, and when you get to the first floor you can stay a while. Then when you are rested you can climb the next 20 stairs. In fact, when you are used to being on the first floor, the second floor is no higher, relative to the first floor, than the first floor was relative to the ground. This means that when you are ready to tackle the tenth floor, you are already nine floors up and the distance that remains is the same as when you were on the ground looking at the first floor. So we don't have to worry at the start how high the steps seem to go, we only need to concentrate on getting to the first floor. When you have reached the ninth floor, the difficulty of getting to the tenth floor will be pretty much the same as what you will have already succeeded in doing nine times before."

The therapist tries to help the person accept the *logic* of exposure, even if the person remains skeptical. As long as the person accepts the logic, exposure can proceed by explaining to the person that the first thought will be the smallest most manageable thought available. If the person has trouble accepting that exposure is the logical solution because of the conviction that he or she is actually dangerous or that some dangerous consequence will

occur, exposure should not be attempted until these ideas become more flexible. First, the therapist must make the distinction between *believing* that this is so and *fearing* that this is so. Second, various techniques may be used to modify this belief (see Freeston, Rhéaume, & Ladouceur, 1996). Alternatively, other minor obsessions that are not associated with such strongly held beliefs can be targeted first to establish that the model is sound.

The main reason for using tape loops (as used in answering machines) or the scenario recorded repeatedly on an ordinary tape for exposure is that they provide the therapist with some ability to manipulate an otherwise covert event.

The main reason for using tape loops (as used in answering machines) or the scenario recorded repeatedly on an ordinary tape for exposure is that they provide the therapist with some ability to manipulate an otherwise covert event: Obsessive thoughts are much less predictable exposure targets than, for example, garbage bins, door knobs, or electrical appliances that are relevant with other forms of OCD. The regular presentation of the thought on tape enables the person to repeatedly practice response prevention. Longer exposure sessions are easier with tape loops than with other techniques requiring repeated trials in imagination, speaking out loud, etc. We do not suggest that tape loop exposure is essential, or is necessarily the best way to proceed: The verbal presentation of the thought may interfere under some situations with successful visualization. However, we believe that tape loops provide a practical, effective means of training the person in exposure and response prevention for covert events. As the person masters exposure and response prevention, the tape may not always be necessary for items higher up the hierarchy where other techniques can be used.

Planning Exposure

As for standard exposure in the behavioral treatment of OCD, hierarchies of exposure targets will be developed. When there are several thoughts, the least anxiety-provoking thought may be targeted first (Table 1).

An example of the text for exposure to the second thought in the hierarchy would be:

> "I'm walking down the street, I see an old woman coming toward me. She looks frail and defenseless. All of a sudden I have the thought, *What happens if I lose control and push her?* My stomach tightens, my hands sweat, and I have trouble breathing. The old woman is much closer. My fists clench and I struggle to keep control. She is almost up to me and I start to panic. She is quickly past me and I keep on walking. I wonder if I did push her. The doubt starts to grow. I see her lying in the street with broken bones. The ambulance comes."

Table 1
Hierarchy for Different Thoughts

Anxiety Level	Thought
2	Shouting rude words
3	Pushing someone when walking in the street
5	Punching someone in the face
7	Attacking someone with a knife
8	Going completely crazy, going on a rampage and killing a lot of people

However, if there is one major thought, it may not be possible to have a variety of exposure targets arranged hierarchically in terms of content. In this case, it is the context of exposure that will vary. Here is an example for a person who had obsessions about stabbing her child (Table 2).

Developing hierarchies may take some creativity, but the use of a Walkman will certainly facilitate exposure in specific physical contexts. We have no evidence that gradual exposure is superior to starting exposure with the thought highest on the hierarchy. However, given the covert nature of obsessions and most neutralization strategies, functional exposure is often hard to achieve initially. It is very important that the person practices implementing complete response prevention, which is generally easier to learn with less anxiety-provoking thoughts. So from a purely practical standpoint, it is often advisable to start with exposure to less threatening thoughts or triggering situations until response prevention of all neutralizing strategies has been fully mastered.

Preparing the text. Once the first target has been identified mutually by the therapist and the client, the therapist

Table 2
Hierarchy for Different Situations for a Single Thought

Anxiety Level	Situation
3	With therapist in the office
4	With therapist in the office with knife and picture of child
5	With therapist at home (or with therapist available by telephone)
6	Alone at home
7	At home with child and husband
8	At home with child only

then asks the client to describe the thought in detail. The therapist asks questions until there is sufficient detail, for example, the precise words, the visual quality of the image, the sounds or smells, any particular attributes, the type of emotional reaction to the thoughts, other ideas that come to mind, and any physical responses. Next, the therapist asks the person to write the thought, using as much detail as possible. Writing the text at double spacing allows easy modification when revising the text. We agree with other sources (e.g., Riggs & Foa, 1993; Steketee, 1993) that it is not necessary to exaggerate or add additional consequences. However, we believe it is necessary for people to expose themselves as far as the feared consequences go. For example, if the ultimate fear related to a harming obsession is arrest, trial, and incarceration for life in a mental institution, it is important to expose up until this point. Alternatively, if what scares the person most is not knowing whether something will happen or has happened, a scenario with the person not knowing the outcome and being plagued by doubt would be the most effective. It can be uncomfortable for therapists when they listen to the horrific scenarios reported by people and the very distressing reactions that occasionally occur during exposure. The technique is highly efficient when properly conducted. The therapist's discomfort will also decrease as the therapist habituates after several experiences with the technique and generates enough new information to correct his or her own catastrophic thoughts about people decompensating or losing control and attacking the therapist.

The text may be very short or it may be a long, evolved scenario. The therapist ensures that no neutralizing element (i.e., anxiety-decreasing element) is included in the sequence. The therapist then reads the thought out loud so that the person can see if there are any parts missing. The person then practices reading the thought out loud so that the therapist can time the text to choose a suitable length tape, and also to ensure that the thought is read with sufficient expression, at a suitable speed, and leaving any pauses necessary to allow images to be formed. The person is asked to read in a way that the therapist can experience what it is like to have the thought. Reading fast, mechanically, or with flat affect may be forms of cognitive avoidance. The thought is then recorded on a looped tape of appropriate length with the number of repetitions necessary to fill the tape almost completely. Alternatively, a standard tape can be used and the message is recorded repeatedly, either "live" or by using a tape recorder with two recording heads to repeatedly copy the message. In our experience, cheaper models of portable tape-recorders accept the looped tape used for answering machines more readily than more expensive models. Spare batteries are essential as some people are able to find any reason to avoid exposure to feared situations.

Exposure Exercise

Once the thought has been recorded and verified, the exposure session can begin. The instructions recalling the role of neutralization (emphasizing function over form) are as follows:

> "We will shortly begin the first exposure session. This will typically take 25 to 45 minutes, although occasionally it may be longer. We will continue until your anxiety level has decreased. Close your eyes and listen to the cassette without neutralizing, don't — [name the specific strategies used by the person] or anything else that has the same effect as these strategies. Stay with the thought, don't block it, filter it, or remove it. If you find your attention wandering, simply redirect your attention to the tape. After each repetition of the thought, report your level of discomfort on the usual scale [typically the scale that is used for self-monitoring]. Now please tell me what we are going to do."

If there is insufficient time to complete exposure during the session (i.e., a minimum of 50 minutes), the exposure will be rescheduled for the next session. It is useful to plan a longer session when exposure is to be conducted the first time (1½ to 2 hours). The therapist asks the person to complete a self-monitoring form before starting the exposure exercise. This typically consists of the current anxiety level, the expected maximum anxiety level during exposure, and the expected anxiety level after the exposure session. It is useful for the therapist to track anxiety ratings on a graph during the exposure session. The therapist can ask the person to report the current anxiety rating at the end of each repeat of the scenario or aloud at 2-minute intervals.

If the level of discomfort has not increased after several presentations, for example after 8 to 12 minutes, the therapist stops exposure in order to conduct a behavioral analysis of the situation. There are several possible reasons why the anxiety may not increase. First, the recording may be inadequate. For example, the words used may not be sufficiently representative of the actual thought or there is insufficient time to form images. Second, some people do not have the ability to imagine the thought sufficiently clearly for functional exposure. If the person is unable after several attempts to imagine themselves in positive or neutral scenes (e.g., on the beach, going to the supermarket), other forms of exposure must be considered such as exposure in vivo. Third, the person may be neutralizing, either by using strategies that have already been identified or by using other previously unidentified strategies. If so, the therapist reiterates the importance of not neutralizing by referring to the model. The therapist should also investigate reasons for neutralizing in the case where the person anticipates negative

consequences. In this case, an intervention of a cognitive nature is necessary to explore, reformulate, or confront these anticipations that may be based, for example, on fears about the consequences of anxiety, or beliefs about thought-action fusion.

Exposure continues if the anxiety increases. Note that increases and decreases in the level of anxiety are not necessarily uniform. The exposure continues until the discomfort decreases below the starting point for at least two presentations and, if possible, until the level of anxiety has decreased much lower than the starting point. The therapist then asks the person to describe reactions to the experience. The reactions are then reframed in terms of the model and in terms of the person's previous expectations. If the exposure has been successful in terms of signs of functional exposure with habituation, the therapist compares the current ratings to the person's initial ratings. If for any reason the expected habituation curve has not been obtained, it is very important to reattribute this result before the person leaves so the session does not end on failure. For example, the therapist can inform the person that other people have experienced difficulty the first time before going on to master exposure. Further, it is normal to experience difficulty the first time when asking someone to radically change a behavior that has continued for many years. The result is attributed neither to a failure of the principle of exposure nor to the person's lack of ability. The result is reframed as a temporary difficulty due to technical factors that will be resolved in later sessions, for example, a lack of correspondence between the thought and the recording, the person's current difficulty to go with the thought because of certain anticipations, or the need for more practice to prevent neutralizing responses. In our experience, the first exposure session is not always highly conclusive because of the difficulties named above. For this reason, it is very important not to give exposure as homework until the person has succeeded during the therapeutic session.

Once exposure has been successfully conducted in the office, exposure may be used at home. This is typically, but not invariably, after two exposure sessions in the office. Our current recommendation is to listen to the cassette once or twice a day. It is important to identify the time and place where it will be possible to successfully complete exposure exercises. It may also be useful to plan for 5 to 6 days out of 7, rather than every day, to avoid the reverse "abstinence violation effect." With this effect, not doing exposure one day leads, by dichotomous thinking, to not doing it at all because the week's objective is now unattainable. Initially the instructions are as follows:

> "Find a place and time where you won't be disturbed. Note the time, the place, and your anxiety level. Listen without neutralizing until the discomfort decreases below the starting point or for a minimum of 30 minutes. If neutralization takes place, reexpose without neutralizing so as to not reinforce the neutralization. When you have finished, note your current anxiety level and the highest anxiety attained during exposure. If you notice new neutralization strategies, note them also."

Later Exposure Sessions

In all sessions where exposure has been given as homework, it is important to examine the homework reports in detail at the start of each session. The duration, ratings, and notes on neutralization should all be addressed. When people are able to complete exposure without neutralizing (or with the ability to recognize neutralizing and quickly reexpose), they can start to conduct exposure when the thoughts occur spontaneously. The instruction here is as follows:

> "When the thoughts occur, just watch them. See them come and watch them go without reacting to them; just leave them where they are without trying to do anything in particular."

In order to increase generalization, the cassette can be modified when it provokes less anxiety (i.e., some between-session habituation has occurred). These modifications call on the person's and therapist's creativity in order to find ways of creating optimal functional exposure. There are four main ways (based on Salkovskis & Westbrook, 1989) of increasing the capacity of the stimulus thought to provoke anxiety.

1. Vary the stimulus. New elements are integrated into the original tape and address any new fears discovered during previous sessions. In a similar way, two thoughts may be presented alternately, either on the same tape, or in alternate homework sessions.

2. Vary the situation. The person listens to the cassette in different situations that normally trigger the thought or increase the thought's salience. Situations that are anxiety provoking or are normally avoided can be used in an appropriate hierarchy.

3. Vary the intensity of the thought. This may be achieved by the use of additional supports, for example, appropriate background noise that may be added (for example, noise of a car or traffic, sound of children, the crying of a baby, etc.). In the same way, props that have particular meaning or represent particular feared consequences may be used, such as photos, objects, appropriate books, films. We have used photos of loved ones, photos of different forms of skin cancer, films about psychopaths or demonic possession, ice picks, axes, knives, curling-irons, headlines and front pages from sensa-

tionalist newspapers (even pasting the person's name into a sensational headline)—anything that adds to the meaning of the thought. It can also be useful to do something as simple as exposing the person while standing up rather than sitting down, particularly when obsessions about harming and loss of control are concerned.

4. Mood state can be varied, either by direct manipulation methods such as musical or by verbal induction techniques, or while reading, handling, or watching any material that is associated with the thought before conducting exposure.

Exposure practice sessions should gradually be faded out when frequency and distress decrease with naturally occurring thoughts and the person is able to successfully implement response prevention for all strategies.

Troubleshooting

Attributions made by the person to account for any changes or any particular experiences should be investigated. For example, if the person reports a decrease in the severity or frequency of obsessions, it is important to investigate the person's explanation for the decrease. Likewise, the therapist should ask whether any feared consequences did in fact occur after exposure. The emphasis here is to reframe or reinterpret the person's experience in terms of the original model and to challenge any alternative attributions. For example, changes in somatic obsessions may be attributed to changes in symptom levels. If this happens, ways must be identified to test the alternative explanations: The person and the therapist can agree that if decreases in each target obsession are observed following exposure, this would indicate that the reduction is due to exposure.

One fairly common response is that the person seems to discover new thoughts or new aspects about the original thought. These discoveries may worry the person and it is important to provide a good explanation.

> "We have previously seen people who seem to discover new obsessions as treatment progresses. This is normally because of successful exposure: The person is now able to go a little further in the chain of feared consequences and can now think about consequences that have previously been avoided. This is a sign of progress and we will integrate the new content into the exposure material. It may be like peeling an onion: There are several layers, but we ultimately arrive at the center."

In some cases, seemingly unrelated obsessions will emerge. It is often possible by using the downward arrow technique to show that these fears are ultimately other manifestations of the same initial fears.

If the person seems to be filtering out the sound and not listening to the recorded thought, other forms of exposure may be used, for example, repeated formation in imagination, repeating the thought out loud, writing the thought, or using objects or situations to increase the relevance of the thoughts. Exposure with tape loops may prove ineffective for people who avoid extensively and so experience few obsessive thoughts. It may be more useful to place the client directly in the situation that triggers the thoughts. Then response prevention is implemented. Of course, exposure to the triggering situation may also be conducted progressively by constructing a hierarchy that increasingly approximates the target situation.

In our experience, only a few people engaged in high-frequency reassurance-seeking behavior. The majority sought reassurance infrequently, but used the information obtained to neutralize in the days, weeks, or even months that followed. However, in a few cases we involved the person from whom reassurance was sought. These were typically partners, but in other cases it was the person's doctor or priest. Partners were instructed not to answer any questions but to reply that they could not answer the question because they were following the therapist's instructions. They were shown how the same question may be asked in many different ways. They were taught to answer using the "broken record technique," answering *all* questions in exactly the same calm, nonaggressive way: "Sorry, I can't answer this question because you and — [the therapist] instructed me not to." As other authors have stated, it may be useful to role-play how to deal with requests for reassurance, especially when the person may become distressed or angry when reassurance is not forthcoming. The doctor was asked to provide specific new information about symptoms when asked direct questions, but not to respond to the anxiety or to make global statements such as "there is nothing wrong with you."

We have also observed a number of cases where exposure and response prevention seems to work despite the absence of typical anxiety increases and decreases. In these cases we have applied the usual ongoing behavioral analysis, checking for ability to form images, use of previously unidentified neutralization techniques, adequacy of scenario, etc. In some of these cases it appears that the person has extremely good insight and in other cases it appears that the person is upset by the thought's presence rather than its content. For example, one person with harming obsessions stated: "I know that I am not dangerous and will not lose control and attack people, but what will happen if I continue having these thoughts? I feel that I am not normal. Will I become depressed? Will I eventually go crazy?" In these instances the thought may not be acutely anxiety provoking because it is not interpreted as a sign of imminent danger. The thought may be

worrisome and may in fact cause more feelings of depression than anxiety. Although some authors have suggested retaining only anxiogenic rather than depressogenic elements in imaginal exposure scenarios (e.g., de Araujo, Ito, Marks, & Deale, 1995), we believe that keeping these ideas is important. The perceived long-term threat by the thought's continuing presence is the key appraisal in this case and thus should be the target of exposure. In some cases people have reported quite dramatic cognitive shifts while conducting exposure, even if they have not reported high levels of anxiety. Thus, although troubleshooting during exposure is essential to detect avoidance, neutralization, etc., it may be that some people will benefit from exposure even without the classical signs of habituation. In this case, exposure and response prevention is better reframed as a behavioral experiment that enables people to challenge faulty beliefs about their obsessions and the future implications of living with OCD.

To prevent confusion between adequate appraisals and possible neutralization, we provide the following rule of thumb: "If you are not sure if you neutralized or not, reexpose immediately—the worst that can happen is that the treatment will produce quicker results!"

Although there are a large number of strategies frequently used by many people, we often observed idiosyncratic strategies in the controlled study (see Freeston & Ladouceur, 1997b). It may take some creativity to adapt response prevention. One problem that does occur is when an important activity is used for neutralizing purposes (e.g., socializing, studying, housework). In this case we recommend response delay: The person waits 15 or 30 minutes before engaging in the activity.

We have seen cases where therapeutic strategies of various origins, including a Socratic dialogue learned in a previous cognitive therapy, have become neutralizing. Further, when subjects develop adequate appraisals during the course of therapy they are sometimes confused as to whether their appraisal is a form of neutralization or not. We have developed a number of guidelines to help people resolve their occasional confusion between neutralizing and adequate appraisal. First, adequate appraisal always allows the person to *act* in an appropriate nonneutralizing manner; this normally means confronting the situation or thought. Second, adequate appraisal does not need to be repeated each time the person is confronted with the thought or situation: If the person finds himself or herself repeating the same cognitive analysis, increasing the efforts to convince oneself, or using the analysis in a stereotyped way, this is a sign that neutralization is probably taking place. Third, new information is useful in adequately appraising new situations; excessive information seeking, or checking on previously obtained information, is also a sign that neutralization is probably taking place. Finally, if the person is not sure, the optimal strategy is to confront the situation or thought. We then suggest a response delay for the cognitive analysis, conducted at some other point in time when the person is not just trying to remove feelings of discomfort, responsibility, etc. To prevent confusion between adequate appraisals and possible neutralization, we provide the following rule of thumb: "If you are not sure if you neutralized or not, reexpose immediately—the worst that can happen is that the treatment will produce quicker results!"

Terminating Treatment

There are no data on relapse for obsessive thoughts without overt compulsions. Experience suggests that treatment is best faded out with increased spacing between sessions and then occasional contact (in person or by telephone) with the therapist for "fine tuning" and learning how to react adequately to new situations. Although much of the necessary information to deal with relapse is implicit throughout treatment, it should be explicitly identified in the later sessions and packaged together in a document that the person can keep. Relapse prevention sessions can also be taped. The essential information in the kit includes:

- A clear understanding of the model and how mood and life events may modulate the model, thus helping the person to understand changes in residual symptom levels and identify early signs of relapse.
- Clear expectations about residual symptoms. The person expects to have some thoughts with occasional flare-ups of more frequent and intense thoughts but will be able to cope with them. In particular, low-frequency triggering situations are more difficult to adjust to because of novelty and the lack of practice. Thus, vacations, unforeseen life changes, and "bad luck" situations are often associated with increases in obsessive symptoms.
- Written instructions about what to do in case of relapse. This may be reduced to the following but is better when presented with personalized detail and examples:

  1. Don't panic.
  2. Revise the model.

3. Don't attach importance to the thought, don't catastrophize.
4. Don't neutralize, avoid, seek reassurance, etc.
5. Do exposure exercises.
6. Analyze key situations, apply restructuring techniques to reevaluate probability, attribute responsibility, and decide on how one should act in the situation.
7. Don't use restructuring techniques when the thought is present.
8. Identify stressors and apply problem solving, seeking aid when necessary.
9. Identify what you were doing when things were going better and that you have stopped doing now.
10. Look at relapses as a chance to put theory into practice and keep up to date, not as a setback or failure.

The general consensus is that developing ways of overcoming difficulties in normal day-to-day living may be useful to prevent relapse in OCD (Emmelkamp, Kloek, & Blaauw, 1992; Riggs & Foa, 1993; Salkovskis, 1989b; Steketee, 1993). Supplements may include assertiveness training, marital or family therapy, stress management training, activity planning, or problem-solving training. People with more difficult life circumstances, exposure to stressors, lack of support, or personality traits that lead to interpersonal or emotional instability may require a longer follow-up period with more frequent contact.

Combined Pharmacological and Cognitive-Behavioral Treatment

As there are no comparative studies of cognitive-behavior therapy and pharmacological treatment for obsessive thoughts without overt compulsive rituals, it is not possible to provide empirically based recommendations. However, experience has shown that in some cases appropriate combinations of antidepressants and cognitive-behavior therapy may facilitate treatment by stabilizing the person, improving depressive symptoms, and establishing an initial sense of control, thus enabling the person to commit more resources to the cognitive-behavior therapy. Close collaboration between the prescribing physician and therapist is necessary to allow appropriate fade-out and/or substitution of alternative medication so that skills may be practiced with appropriate symptom levels and permit adequate attribution of treatment gains to the new skills that have been learned during cognitive-behavior therapy. Attributing improvement to therapy is very important: Medication may have made things easier, but the new skills and new way of doing things came from the person's efforts. This may decrease the likelihood of relapse when medication is withdrawn. We have observed that some people with prior history of depression and/or relapse when previous trials of medication were withdrawn may particularly benefit from a continued low (i.e., "subtherapeutic") maintenance dosage of medication while lifestyle changes are made following successful cognitive-behavior therapy. With a safety net in place, the person will feel more confident and more able to meet the challenges of learning to live with reduced obsessions.

Many of the potential pitfalls in using these techniques may be avoided (at least the second time around) by the application of the behavioral principles such as continuing functional analysis that underlie sound cognitive-behavioral therapy.

Concluding Comment

The heterogeneity of OCD and obsessive thoughts would preclude a rigidly structured approach to treatment, even if such an approach were desirable. We believe that there is no fundamental opposition between manualized treatments and idiographic case formulation. The approach to the treatment of obsessive thoughts presented here and elsewhere (see Freeston et al., 1996, for complementary cognitive interventions) assumes that the implementation of the techniques is based on thorough and ongoing assessment. Many of the potential pitfalls in using these techniques may be avoided (at least the second time around) by the application of the behavioral principles such as continuing functional analysis that underlie sound cognitive-behavioral therapy.

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CBT for OCD: The Rationale, Protocol, and Challenges

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Behavior therapy, specifically exposure plus response prevention (ERP) has been firmly established as the treatment of choice for obsessive-compulsive disorder (OCD). However, the dropout rates plus the percentage of people who do not benefit from ERP require reconsideration. For those people who do receive benefit, a considerable portion of the presenting OC symptoms remain, often necessitating further treatment. Newer cognitive-behavioral approaches that focus on challenging OCD appraisals and beliefs have been proposed as alternatives to ERP. The CBT conceptualization, rationale, and treatment strategies are described, as are the challenges. The pros and cons of conducting treatment in groups are also discussed.

Prior to the development and testing of exposure and response prevention (ERP), obsessive-compulsive disorder (OCD) was seen as a chronic and debilitating condition with little hope for improvement using traditional psychotherapy methods. However, with the introduction and development of ERP (Meyer, 1966) and experimental studies by Rachman and colleagues (e.g., Rachman & Hodgson, 1980), behavior therapists now have a powerful tool to treat OCD. To date, hundreds of subjects have participated in controlled treatment trials of OCD, the results of which have firmly established ERP as the psychosocial treatment of choice for OCD.

Data on short- and long-term treatment outcomes are promising. For example, Foa, Steketee, and Ozarow (1985) reviewed outcome studies done in the 1980s and reported that approximately half of the subjects who completed treatment were either symptom free or much improved (i.e., minimum of a 70% decline in symptoms), 39% were moderately improved (31% to 69% decline in symptom severity), and 10% reported no benefit (less than 30% improvement). In a recent metaanalysis, van Balkom et al. (1994) reported that behavior therapy resulted in an average effect size of 1.46 and was significantly more effective than placebo in self- and assessor-rated measures. In long-term follow-up, O'Sullivan and Marks (1991) reported that 79% of patients were improved or much improved 1 to 6 years after completion of treatment.

Despite the positive short- and long-term results, clinical outcome must be considered in light of treatment refusers and dropouts. Stanley and Turner (1995) reported that 20% to 30% of patients either refuse to begin treatment or drop out prior to completion. When dropouts and refusers are included and conservative estimates are used, the percentage of people who gain benefit from treatment in the short term decreases to 63% while approximately 55% are considered treatment successes at long-term follow-up (Stanley & Turner).

Another caveat to consider is that residual symptoms often remain even after intensive treatment. Very few treatment outcome studies have assessed clinically significant change and those that have (e.g., van Oppen et al., 1995) found that the percentage who obtained a clinically significant change (i.e., high end-state functioning or reliable change on a variety of assessment measures) was much lower than those who obtained a statistically significant change. Using the most common dependent measure, the Yale-Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989), average posttreatment

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Continuing Education Quiz located on p. 465.