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Cognitive-behavioral treatment of obsessive-compulsive disorder: A case of prolonged tooth brushing.

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ABSTRACT

Obsessive-compulsive disorder (OCD) in children and adolescents is a prevalent condition with a number of adverse correlates and implications. The cognitive-behavioral treatment of an 11-year-old girl with prolonged tooth brushing is described in this case study. The frequency of the compulsive behavior was measured over the course of the treatment and standard assessment devices were used to determine the nature and severity of the OCD symptoms. Results of the intervention were suggestive of substantial improvements in OCD symptoms and a reduction in the associated impairments. The implications of these data were reviewed and recommendations for clinicians who intend on treating OCD in children and adolescents were provided.

ARTICLE

1 THEORETICAL AND RESEARCH BASIS

Obsessive-compulsive disorder (OCD) is a psychiatric condition characterized by recurrent or intrusive thoughts (i.e., obsessions) and by repetitive mental or behavioral acts (i.e., compulsions) typically aimed at reducing the distress and anxiety associated with the obsessions (March & Mulle, 1998). Lifetime prevalence estimates for OCD range from 2% to 3% (Zohar, 1999). With respect to point-prevalence estimates for children and adolescents, it appears that approximately 1 in every 100 youngsters suffers from OCD at any given time (Flament, 1990) and as many as 50% of the cases of OCD begin during childhood (Rasmussen & Eisen, 1990). Average age of onset for childhood OCD is between 9 and 12 years of age (Hanna, 1995). Although the sex ratio of OCD is about equal in adult samples, clinic-based studies are suggestive of a higher proportion of OCD among boys than girls (American Psychiatric Association, 2000). However, this

finding has not been replicated in community samples and is in need of further study (Albano, Chorpita, & Barlow, 1996).

Several negative implications and correlates of OCD have been documented in the literature. For example, Piacentini, Bergman, Keller, and McCracken (2003) examined the functional impairment in 151 clinic-referred youth diagnosed with OCD between the ages of 5 and 17. Piacentini et al. reported that according to the parents, almost half of the youngsters had significant trouble concentrating, completing homework, and getting ready for bed at night. The youth provided similar reports of the same variables, although to a somewhat lesser degree. Furthermore, the authors reported that the completion of particular rituals (e.g., bathing/grooming) was identified by both parents and youth as either a moderate or significant concern by a large proportion of both groups. With regard to the bathing/grooming rituals in particular, they appeared to be more evident in the morning as opposed to the evening.

Overall, the effect of anxiety disorders such as OCD during childhood has been shown to be associated with a number of negative outcomes, including diminished educational attainment (VanAmeringen, Mancini, & Farvolden, 2003), poor peer relationships (Allsopp & Verduyn, 1988), excessive negative appraisals of intrusive thoughts (Janeck, Calamari, Riemann, & Heffelfinger, 2003), and increased family dysfunction (Cooper, 1996). With respect to family impairments in particular, Barrett, Rasmussen, and Healy (2001) reported that family members often get inducted into the obsessive compulsive rituals in an effort to reduce the distress experienced by the OCD patient. However, Barrett et al. (2001) reported that these well-intended efforts of accommodation can actually reinforce the ritualistic patterns experienced by the OCD sufferer. Given the prevalence and adverse correlates of OCD, combined with the likelihood of experiencing a first episode during childhood, expeditious diagnosis and treatment are essential in preventing further impairments or future morbidity in a substantial number of young people.

Currently classified as an anxiety disorder in the *Diagnostic and Statistical Manual Of Mental Disorders (DSM-IVTR*; American Psychiatric Association, 2000), the hallmark symptoms of OCD are obsessions and compulsions. Obsessions are defined as recurrent and persistent intrusive thoughts or images that cause marked distress, and compulsions are characterized by repetitive behaviors that a person feels compelled to perform to avoid or stop a dreaded event from occurring. The most common obsessions during childhood are concerns about contamination, symmetry, intrusive thoughts about harming others, and preoccupations with sexuality, bodily issues, and religious ideas (Geller et al., 1998).

The most common compulsions observed during the course of child and adolescent OCD are cleaning and washing rituals, checking, counting, ordering, and hoarding behaviors (Geller et al., 1998). Although obsessions and compulsions are often related, many young children with OCD experience a compulsive pattern without a clear awareness of presence or nature of their obsessions (Mash & Wolfe, 2002). It also appears that for children older than age 8 who become aware of their obsessions, they are more likely to conceal or resist efforts to discuss their obsessions, which limits parental attempts to detect the presence of OCD (Rapoport et al., 2000).

Based on several narrative reviews of the extant literature on child and adolescent OCD, cognitive-behavioral therapy (CBT) is the treatment with the most empirical support

to date (Barrett, Healy-Farrell, & March, 2004). Indeed, the OCD Expert Consensus Panel (1997) recommended CBT as the first-line treatment for all prepubertal cases of OCD. According to published guidelines (e.g., Huppert & Roth, 2003; March & Mulle, 1998) the primary components of CBT for OCD in youth include exposure (EX) and ritual prevention (RP). During EX, the child is confronted with situations, thoughts, or objects that invoke an anxious response or psychological distress. For example, if the obsessions involve a fear of contamination and the associated dread that some serious event will transpire (e.g., life-threatening illness), the child is exposed to the stimuli that precipitate an anxious reaction (e.g., dirty hands). RP is conceptualized as a means of keeping the child from performing the behavior that alleviates the anxiety (e.g., hand washing). Theoretically, when the child remains in the feared situation long enough, the anxious reaction will diminish once he or she learns that the feared and dreaded event (e.g., life-threatening illness) will not occur and that this assumption is not realistic in the first place.

In addition to the basic components of EX and RP, a family-based intervention is often viewed as an important component, given the adverse consequences that OCD has on family functioning as well as the potential for including prominent family members during the course of treatment (March & Mulle, 1998). Indeed, in a recent study, Barrett et al. (2004) reported that “contrary to previous findings and expectations, group CBFT [cognitive-behavioral family treatment] is as effective in reducing OCD symptoms as individual treatment” (p. 46).

In terms of pharmacotherapy for childhood OCD, there have been several studies in which the efficacy of medications has been investigated. For example, Liebowitz et al. (2002) used fluoxetine in the treatment of 43 OCD patients between 6 and 18 years of age. The authors reported that although fluoxetine was not superior to placebo after 8 weeks of treatment, a higher proportion of patients (57%) taking the active medication reported substantial improvements after 16 weeks when compared to the patients taking placebo (27%). However, despite some encouraging recent results with regard to the use of particular selective serotonin reuptake inhibitors (SSRIs) in the treatment of childhood OCD, CBT remains as the treatment of choice for this condition (Barrett et al., 2004).

2 CASE PRESENTATION

At initial assessment, “Julie” (not her real name) was an 11-year-old elementary school student. She was referred for treatment by a local physician and her parents. This was Julie’s first experience with psychological treatment. According to Julie and her parents, the onset of her OCD symptoms began shortly after having braces put on her teeth approximately 5 months before seeking consultation. After the braces were installed, Julie developed an increasingly complex and time-consuming dental hygiene ritual that lasted more than 4 hours during most evenings. The parents attempted to intervene by monitoring her nightly ritual and at times actually removed the toothbrush from her hands when it extended past several hours. Julie and her parents also reported a substantial number of impairments associated with her prolonged tooth brushing, including disturbed or limited amount of sleep, disruption of the family routine, and an avoidance of social events (e.g., sleepovers) secondary to the anxiety of not being able to perform the ritual adequately. Once it became clear that the home remedies were ineffective, Julie and her parents opted for professional consultation.

3 PRESENTING COMPLAINTS

During the initial evaluation, Julie reported that “I cannot stop [brushing my teeth] until I have brushed to my satisfaction or when I have gotten all of the food out.” Julie expressed the concern that “I will never be able to stop and it will only get worse.” Although Julie was not necessarily forthcoming about her obsessions at first, she eventually complained that she was “terrified of getting cavities” and that she experienced the internal cognitive self-statements, (a) “I am not finished yet,” and (b) “I have not gotten all of the food out,” which she eventually transformed into a compulsive ritual of excessive and prolonged tooth brushing, often lasting more than 4 hours per night. The prolonged brushing served the purpose of temporarily reducing her distress associated with the aforementioned obsessive thoughts. Other than these complaints, Julie did not endorse significant symptoms of depression, low self-esteem, or any other bodily concerns.

4 HISTORY

Julie is the first of two children. Her parents, both with advanced graduate degrees, are still married. Julie lives with her parents and her younger sister. Julie was described as an “excellent student” who takes a great deal of pride in her work. Julie reported that her family life was positive and although she said that her younger sister was “annoying” at times, she described her family as very supportive. Indeed, since the onset of her OCD symptoms, Julie said that she relied heavily on her parents for a great deal of emotional support and reassurance, especially when she became distressed about her dental hygiene ritual during the evenings.

As described previously, Julie’s prolonged tooth brushing ritual began shortly after getting braces. Prior to this event, her evening tooth brushing ritual lasted approximately 10-15 minutes. She recalls getting instructions from her orthodontist that she would need to brush more thoroughly (approximately 5-10 minutes more), given that the braces would hinder her ability to get all of the food particles out after meals. In addition to the verbal instructions from the orthodontist, she was shown a picture of the mouth of someone who did not practice appropriate dental hygiene after having braces installed and subsequently had serious damage due to the insufficient hygiene. Shortly after her appointment with the orthodontist, Julie had another discussion with an orthodontic assistant, who described a more extensive hygiene plan (approximately 10-15 minutes longer than usual) that was reportedly more rigorous than the orthodontist’s prescribed hygiene ritual for those with braces. Julie said that she viewed the second plan as an endorsement of a much longer hygiene ritual. The image she saw of the patient who did not practice good oral hygiene provided her with an additional impetus for the development of the ritual.

In summary, Julie’s primary reason for seeking treatment was to address her pattern of compulsive tooth brushing during the evenings, which eventually took longer than 4 hours of time to finish. As a result, she began to experience decreased sleep, a substantial disruption of her family routine requiring extensive parental supervision, and social impairments (i.e., diminished involvement in social activities).

5 ASSESSMENT

During the first two sessions, Julie and her parents participated in a semistructured clinical interview adapted from the Structured Clinical Interview for *DSM* (Spitzer, Williams, Gibbon, & First, 1992). She also participated in a semistructured interview using the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Scahill et al., 1997), which is a downward extension of the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS; Goodman et al., 1989). According to the data from both semistructured interview formats, she met *DSM-IVTR* (American Psychiatric Association, 2000) criteria for OCD, given her recent but significant history of OCD with associated impairments in family, social, and academic functioning. Julie's pretreatment CY-BOCS score of 25 was in the moderate range of severity, indicating significant distress and impairment associated with her OCD symptoms (March & Mulle, 1998). The OCD diagnosis was based on the evidence that she experienced recurrent and persistent intrusive thoughts or images (i.e., intense fear of cavities and obsessive rumination of "I am not finished yet" and "I have not gotten all of the food out") that cause marked distress and compulsions (i.e., compulsive and excessive tooth brushing) that she felt compelled to perform to avoid or stop the dreaded event (i.e., cavities, dental damage consistent with the image of poor dental hygiene presented by the orthodontist) from occurring.

In addition to the interview data, Julie's parents completed the Parent Report Scale of the Behavioral Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) before and after treatment. The BASC is a 138-item multidimensional scale of behavioral and emotional functioning for children between the ages of 4 and 18 years. The BASC can be used for a multitude of purposes such as clinical diagnosis, educational classification, program evaluation, and scientific research. The system includes five different forms: self-report, teacher, parent, developmental history, and a form recording classroom behavior. The form used in this study was the Parent Rating Scale (PRS) for children between 6 and 11 years of age. The PRS includes items concerning the child's adaptive and problem behaviors. Each of the 138 items included four choices: N (the behavior in question never occurs), S (the behavior sometimes occurs), O (the behavior often occurs), and A (the behavior almost always occurs). Administration of the BASC is straightforward and usually takes between 10 and 20 minutes to complete. In addition to the adaptive scales (i.e., social skills, adaptability, and leadership), the BASC produces scores on the following 11 clinical subscales: aggression, anxiety, attention, atypical behaviors, conduct problems, depression, hyperactivity, leadership, social skills, somatic complaints, and withdrawal.

Based on separate reports completed by each parent, Julie evidenced average to above average adaptive skills. Julie's mother reported clinically elevated (T -score > 60) symptoms of anxiety ($T = 63$) and a borderline elevation ($T = 59$) on atypical behaviors, which contains items associated with OCD symptoms (e.g., "repeats one activity over and over, complains about being able to block out unwanted thoughts"). There were no other notable elevations according to the mother's responses on the BASC. Although the PRS completed by Julie's father did not reveal any clinical elevations, the two highest subscale scores were on anxiety ($T = 51$) and atypical behaviors ($T = 50$).

In terms of descriptive data as to prolonged tooth brushing in particular, Julie and

her parents reported that the hygiene ritual lasted anywhere between 2 and 4 ½ hours each night with noteworthy distress (e.g., tearfulness, negative interpersonal exchanges) experienced by many family members during the process. According to reports, the dental hygiene ritual in the morning lasted approximately 10 minutes. When Julie was asked why she did not engage in excessive tooth brushing during the morning routine, she said that she did not have to worry about “getting the food out” like she did during the evenings. After the initial session, Julie and her parents were instructed to keep an exact log of the time Julie engaged in the hygiene ritual each night. She was further instructed on the use and rationale of a functional analysis of her tooth-brushing behavior. She kept track of antecedent, tooth-brushing, and consequent events between sessions. Moreover, she was instructed on the use of a subjective unit of distress scale (SUDS) to further monitor her psychological status before, during, and after the dental hygiene ritual. Her mother agreed to keep a similar log in which she evaluated Julie’s levels of distress during the baseline assessment phase.

Overall, assessment revealed that Julie was suffering from primary OCD without evidence of comorbid psychiatric conditions. An incidental finding from the assessment revealed that Julie might have been somewhat primed for OCD in the sense that she had extremely high expectations for herself, both personally and academically. She was a gifted student and a highly intelligent young woman who excelled in academics and other pursuits, such as music. Although the descriptor “perfectionist” comes to mind in Julie’s case, this is not necessarily meant to be a derogatory label. Instead, this characteristic was viewed as a potential correlate in the context of a behavioral set that was an extreme exaggeration of a normal hygienic behavior, which is often true of the behaviors individuals develop during the course of OCD (Geller et al., 1998). Furthermore, although she reported significant distress associated with the prolonged tooth-brushing ritual, her motivation to pursue treatment was low and primarily based on the fact that her parents insisted she undergo psychotherapy.

6 CASE CONCEPTUALIZATION

Given the existing literature on OCD that supports both conceptualizations and treatments based on cognitive and behavioral principles, Julie’s treatment plan was based on the EX and RP paradigm previously described along with family components now seen as important in the treatment of such conditions (Freeman et al., 2003). The EX component was being exposed to food in the mouth (remnants that remain after a reasonable oral hygiene regimen was performed). However, because RP is technically the complete prevention of the compulsive response, Julie’s treatment was aimed at curtailing the duration of brushing to a reasonable and adaptive level, given that it represented an extreme exaggeration of a normal hygienic behavior. In other words, she was prevented from excessive brushing (operationalized as greater than 30 minutes). During the initial stages of treatment, Julie’s parents were essentially in charge of the EX/RP process in that they supervised the regimen, promoted exposure to food bits that were not removed, and prevented excessive brushing (past the allotted period of time established for that particular day). Eventually, Julie became more and more responsible for curtailing her own brushing.

According to Julie and a functional analysis of her ritual, the pattern of prolonged tooth brushing was reinforced in at least two ways. First, her parents, in an effort to

reduce the distress associated with the behavior, often gave her breaks in the routine where they provided emotional support and reassurance that inadvertently extended the ritual at times. Second, during the 5 months after having the braces installed, she did not experience any apparent adverse consequence (e.g., cavities, gum damage) that served to negatively reinforce the extended routine. So, in a sense, she developed a superstitious cognition that her behavior was indeed helping her to alleviate the possibility of experiencing the feared event (i.e., cavities) and she felt compelled to persist with this behavior.

Given the aforementioned conceptualization, she was prescribed a plan to test the veracity of her superstitious assumptions, the utility of performing such a behavior for an extended period of time, and the rationale and potential consequences of engaging in such a routine. From a therapy effectiveness standpoint, the critical outcome variables were deemed to be (a) the amount of time actually engaging in the ritual; (b) the amount of distress she experienced before, during, and after the behavior; and (c) the nature and impairments associated when thinking about her obsessions.

7 COURSE OF TREATMENT AND ASSESSMENT OF PROGRESS

The active phase of Julie's treatment included 14 sessions over a 6-month period. As described above, the active treatment included EX with RP along with critical family components (e.g., parental supervised dental hygiene, exposure to food bits, and response prevention of excessive brushing). Formative evaluation efforts were conducted throughout the intervention phase and necessary adjustments and revisions were made to promote the best possible outcome for Julie and her family. In addition, there were several phone and e-mail contacts during which progress or stumbling blocks were discussed with Julie and her parents and revisions to the treatment plan were considered. Most of the intersession contacts were psychoeducational in nature and involved attempts for the therapist to predict and assuage parental concerns when impediments to Julie's progress were encountered or when the specifics of the EX and RP procedures needed additional clarification. Furthermore, Julie provided regular updates concerning her progress directly to the therapist via electronic correspondence.

As reported previously, Julie and her parents monitored the time taken to complete the tooth-brushing ritual each night. Immediately after the monitoring system was implemented, the parents contacted the therapist to report that Julie's tooth-brushing ritual lasted 4 hours or more on two of the first four nights after the intake session. Moreover, according to Julie's parents, she began to show signs of limiting her food choices to avoid excessive food entrapment even though she preferred the taste of such food. Thus, given the immediate escalation of tooth-brushing behavior, a decision was made between the therapist and the parents to place an upper limit (i.e., 3 hours) on the time she was allowed to engage in the evening ritual. This type of intervention (i.e., parent enforced exposure and response prevention) is consistent with the principles seen in family-based treatments for childhood OCD. As noted previously, the RP was modified to be the prevention of excessive brushing, because it would have been inappropriate to completely prevent the behavior in question (i.e., oral hygienic behaviors).

During the second session, Julie and her parents developed a reasonable treatment goal to reach as a benchmark for effectiveness. Given the hygienic guidelines for children with braces and other devices (e.g., Herpst device) set forth by professionals, Julie

and her parents agreed that limiting her hygienic ritual to 30minutes at night was reasonable and sufficient. In addition, in response to Julie's request for a gradual reduction in tooth-brushing time, a contract was developed in which it was agreed that Julie would begin reducing her time by 5minutes each night until she reached 2 hours of total time, then reduce it by 3minutes per night until she reached 90 total minutes, followed by a 2-minute reduction until she reached 60 total minutes, and finally a reduction of 1minute each night until she reached her treatment goal of 30minutes per night. Along with her time ratings, Julie provided a SUDS rating (1-100 scale, with higher numbers denoting greater distress) at periodic intervals throughout the course of treatment.

During Sessions 3 through 13, the content of the therapy included an exploration of Julie's obsessions and irrational beliefs (e.g., "I will get many cavities if I don't brush for 3-4 hours") associated with her dental hygiene ritual and ways to contradict these assumptions. An attempt was made to label the obsessions and compulsions as coming from an external agent (e.g., "OCD beast") that needs to be "bossed back" (March & Mulle, 1998). The bossing-back strategy is seen as a way to diminish Julie's tendency to view her OCD symptoms as a character defect as opposed to a learned but maladaptive cognitive/behavioral pattern. This type of intervention is thought to reduce the shame associated with having childhood OCD and is thereby seen as a potential means to increase motivation to change the maladaptive cognitive behavioral tendencies (March & Mulle, 1998). The therapist then recruits allies for Julie to rely on in battling the OCD beast (e.g., parents, self, friends, fellow patients). Given that she enjoyed reading the Harry Potter books, she opted to call her OCD beast "Voldemort" (Harry Potter's nemesis). Likewise, Julie experienced Voldemort as "evil" and "mean." Therefore, she was encouraged to defeat Voldemort and not give in to the troubling thought patterns he generated (e.g., "you have not gotten all of the food out," "you need to keep brushing").

Julie was encouraged to develop more adaptive cognitions in response to the maladaptive thoughts such as, "I am finished" [brushing], and "I refuse to be defeated by Voldemort." Also in the spirit of developing contrary cognitive evidence against prolonged tooth brushing, Julie constructed a list of likely adverse events associated with excessive dental hygiene (e.g., damage to gums, parental distress, loss of family time, decreased participation in social activities). She was instructed to post the list of adverse consequences in the same physical space where she performed her dental hygiene ritual to render the contextual environment less hospitable to her compulsive routine.

In addition to the above-mentioned strategies to forge more adaptive cognitions and behaviors, outside expert consultation from an orthodontist was sought to provide additional evidence to contradict her OC routine. The orthodontist provided written documentation of an appropriate program of dental hygiene wherein the risks for adverse consequences of either too little hygiene (e.g., cavities) or too much tooth brushing (e.g., gum damage) were minimized.

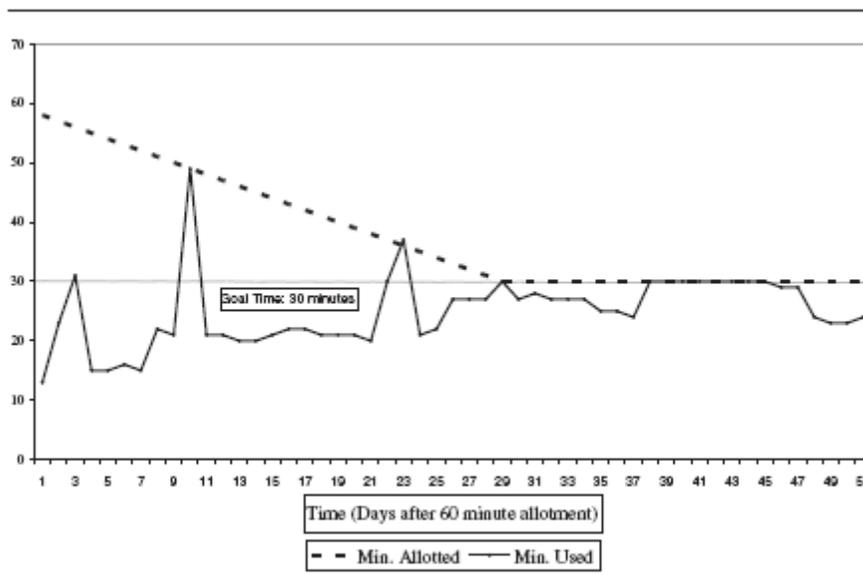


Figure 1. Tooth Brushing Time After the 60-Minute Time Allotment Was Imposed

The bossing-back strategy appeared to be especially important in Julie’s case, given her general self-impression as a competent young woman. She seemed quite embarrassed about having to undergo treatment for such a condition, and attributing her condition to the evil Voldemort seemed to diminish the shame she experienced. As an adjunctive means of chipping away at the shame Julie reported, other same-aged, same sex peers were sought to provide an OCD “buddy” to acquire peer support. At one point during treatment, Julie composed a letter to another OCD patient, which seemed to reduce her subjective experience of embarrassment about having such a condition.

As depicted in Figure 1, once Julie’s nightly dental hygiene ritual was limited to 60 minutes, she began to evidence sustained reductions in tooth-brushing time until her allotted time was reduced to 30 minutes. However, as the time allotted began to converge with the time used, Julie began to report a subjective increase in her SUDS ratings. Nonetheless, the longer Julie was exposed to the null adverse effects of the reduced brushing time, her SUDS ratings began to decline steadily to the point where she viewed her 30-minute routine as simply that, a routine without the previously experienced pattern of distress and family impairment that was evident at intake. Essentially, this was viewed a diminution of the anxious response after she discovered that the feared event did not occur as expected previously.

In terms of the posttreatment findings on the CY-BOCS and the BASC–PRS, Julie evidenced a substantial reduction in her OCD symptoms. On the CY-BOCS, her posttreatment score of 7 was reflective of a 72% reduction when compared with her pretreatment OCD symptomatology. Furthermore, although Julie’s mother’s responses on the BASC–PRS were suggestive of a clinical elevation in anxiety at pretreatment, these scores were substantially improved after treatment and were within the normal range (anxiety *T*-score = 50; Atypicality = 41).

Finally, from a qualitative standpoint, Julie reported substantial reductions in distress (i.e., SUDS) associated with her dental hygiene ritual. Her average SUDS ratings

were approximately 70 during the first 4 to 5 sessions but decreased to approximately 32 after Session 14. In addition, Julie described much more reasonable thoughts with regard to her tooth-brushing behavior. For example, at the end of treatment, she said that she was “comfortable” with taking 30 minutes or less to complete her hygienic regimen (average time brushing was approximately 22 minutes per night). Furthermore, Julie said that she no longer experienced obsessions associated with the fear of getting cavities unless she brushed excessively. Similarly, Julie’s parents reported significant improvements in family routine and virtually no disruption to the family routine or a tendency for Julie to avoid particular social events.

8 COMPLICATING FACTORS

Perhaps the most significant complicating factor in Julie’s treatment was her age and her low motivation to participate in treatment. Initially, she was not forthcoming about her obsessions, making development of alternative, more adaptive cognitions challenging. The most apparent symptom was the actual time she engaged in the ritual, which we were eventually able to convince her was impairing and irrational. The bossing-back strategy combined with the effort to create some distance between her personality and the behavior itself seemed to increase her motivation to assume more responsibility for her own treatment. However, it seems developmentally appropriate that youngsters with OCD have a hard time accepting the notion of having OCD because childhood is presumably a time when such stressors should not play such a significant role in one’s life. In the end, it appeared as if we were able to enlist a cadre of contramessages (parents, self, therapist, fellow OCD patients, and orthodontist) that offered the consistent message that brushing for such a prolonged period of time really was not worth it, and eventually her own behavior became congruent with this more reasonable assumption.

9 MANAGED CARE CONSIDERATIONS

Julie was fortunate to have a reasonably good insurance plan as part of her parents’ coverage. Moreover, her parents were willing to pay out of pocket for the portion of treatment not covered by the insurance plan. Finally, in the age of managed care, it often becomes necessary to provide intersession contacts (often at no additional cost to the patient) to ensure that the treatment protocol is being followed and that necessary adjustments to the treatment are being made as the data become available.

10 FOLLOW-UP

Julie’s parents provided updated information about her status approximately 1 month after the active phase of treatment. At the time of contact, Julie’s mother said that she continued to limit the amount of tooth brushing in the evenings to 30 minutes or less. No other concerns were reported by Julie or her parents. Additional follow-up probes will be conducted to monitor Julie’s progress.

11 TREATMENT IMPLICATIONS OF THE CASE

s illustrated above, childhood OCD is a complex disorder with a diverse presentation that is often difficult and challenging to treat. However, based on the data obtained here, it appears that a CBT treatment protocol with EX and RP can be an effective means of providing relief to youth suffering from OCD. In addition, it appears that an emerging but necessary component of treating child OCD is the use of family-based strategies when implementing the EX and RP procedures. Another important implication is the notion of providing treatment to otherwise healthy individuals from very supportive family systems. In Julie's case, she had a number of exceptional attributes that probably assisted in her recovery, including parents willing to engage the struggle for improvement right alongside and regular intersession contacts to make necessary adjustments to the treatment regimen.

12 RECOMMENDATIONS TO CLINICIANS AND STUDENTS

Given the experience working with Julie and the extant literature as to the treatment of OCD, three recommendations are offered to clinicians who intend to treat youngsters with OCD. First, it is recommended that before attempting to treat childhood manifestations of OCD, practitioners become well acquainted with CBT in the treatment of OCD, as well as the nature of EX and RP procedures with young people. Second, assessment data should be multifaceted, including semistructured interviews with established measures (e.g., CY-BOCS), self-report data (e.g., SUDS, time spent performing the ritual), and broad parent report measures (e.g., BASC, direct observations). Third, clinicians should remain mindful that for most disorders experienced by youth, the interventions with an emerging body of support include prominent family components in the conceptualization and execution of effective treatments (e.g., Barrett et al., 2004; Freeman et al., 2003).

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