Unfortunately, if obstructive sleep apnea goes undiagnosed it can lead to serious and life-threatening problems, such as growth and developmental delay, learning disabilities, cor pulmonale, and adult respiratory distress syndrome (Singer and Saenger, 1990). However, obstructive sleep apnea in children is often difficult to diagnose as the most obvious signs may be present only at night; during the day in the doctor's office the patient may appear completely healthy (Rosen and Haddad, 1996). At times the only presenting symptoms may appear completely unrelated, as in this patient, who presented with secondary enuresis.

Obstructive sleep apnea has been reported in the past to be linked to enuresis. Studies have shown that those with obstructive sleep apnea have increased sodium excretion and urine volume at night. It is thought that this is related to increased levels of atrial natriuretic peptide (Everaert et al. 1995). In addition, it has also been shown that after treatment of obstructive sleep apnea, patients have increased plasma renin and aldosterone levels, resulting in decreased urine volume and sodium excretion (Everaert et al., 1995).

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SEXUAL OBSESSIONS IN OBSESSIVE-COMPULSIVE DISORDER

To the Editor:

This letter reports on 2 children with onset of obsessive-compulsive disorder (OCD) after sexual abuse/sex play. Both cases present interesting diagnostic questions related to overlap and comorbidity between OCD and posttraumatic stress disorder (PTSD).

Phenomenological studies report that approximately 4% of children with OCD have obsessions with "forbidden, aggressive, or perverse sexual thoughts, images or impulses" (Swedo et al., 1989). We have evaluated many children who have sexual obsessions as part of their OCD without evidence of past abuse. Indeed, OCD is not cited among common sequelae of child sexual abuse (Kendall-Tackett et al., 1993).

Recently, 2 children presented to our OCD specialty clinic with sexual obsessions and a reported history of sexual abuse; the onset of OCD followed the abuse incident. Both patients had ruminations about the event(s) suggestive of the "reexperiencing" symptoms of PTSD, but they did not meet full diagnostic criteria. Their obsessions included ruminating about the abuse and a broad array of other obsessions unrelated to the experience and consistent with typical OCD symptoms.

Case 1. A 10-year-old boy was referred for obsessions related to dirt and germs, scrupulosity, and aggressive/sexual images and a ritual of confessing thoughts to his mother. He met diagnostic criteria for OCD. At age 5 years the patient had been sexually abused repeatedly by an older peer; onset of OCD symptoms occurred shortly after the cessation of abuse. There were no reported PTSD symptoms of avoidance, emotional numbing, or physiological arousal. There was no history of anxiety. The patient's family psychiatric history included anxiety in the mother and maternal aunts.

Case 2. A 7-year-old girl was referred for obsessions related to sexual images, bodily fluids, harm coming to herself, hurting others, and concerns about saying things "exactly right." Rituals included compulsive handwashing and confessing her thoughts to her mother. She met criteria for OCD. The patient had been involved in an incident of unwanted "sex play" with a peer 3 months earlier, and the onset of OCD symptoms immediately followed. There were no reported PTSD symptoms of avoidance, emotional numbing, or physiological arousal. She had no previous psychiatric treatment, and she was not anxious or perfectionistic prior to this incident. The family psychiatric history included probable OCD in the patient's mother.

The symptoms in these cases present interesting diagnostic issues for clinicians. There are multiple disorders in which children may demonstrate obsessive or ruminative worries or ritualistic behaviors. However, OCD is generally thought to be easily distinguished from PTSD, because it lacks a specific traumatic event and trauma-specific intrusive thoughts (Amaya-Jackson and March, 1995). Rarely, symptoms of OCD may develop in the context of PTSD by secondary generalization (e.g., developing contamination fears and washing rituals after sexual assault) (Amaya-Jackson and March, 1995). In these cases, however, the diagnosis of OCD was evident, whereas the full criteria for PTSD were not met. It appears that the sexual abuse incident was incorporated into OCD symptomatology. Although high comorbidity among anxiety disorders is well established, the interrelationship of the two disorders is notable.

This leads to questions regarding risk factors for the development of OCD and PTSD. Premorbid anxiety disorders may place children at higher risk for developing PTSD-type reactions after traumatic events as described by Asarnow and colleagues (1999). In some cases, exposure to trauma, depending on severity, may play a role in the development of some cases of OCD. One might speculate that this may be particularly relevant in those patients who are "at risk" to develop OCD.

Overall, these cases raise important issues with regard to assessment and diagnosis of child anxiety and trauma. In chil-

dren presenting with sexual obsessions and OCD, it is important to consider sexual abuse. In cases where abuse is documented (or suspected), treatment may need to target symptoms of both OCD and PTSD.

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