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Obsessive Compulsive Disorder: A Case Report

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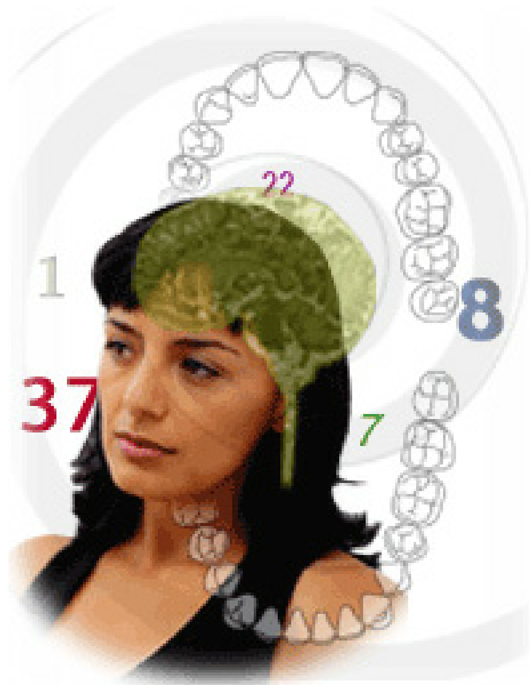

Abstract

A general dentist often will find the most challenging aspect of dentistry is patient management. In the controlled environment of a dental school, many students are not exposed to certain patient populations. It is likely that their first experience with particular patient pools will be in private practice. One such group of patients is those suffering from Obsessive Compulsive Disorder (OCD). This article reviews the clinical signs and symptoms of this group of patients.

Keywords: Obsessive Compulsive Disorder, OCD

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Introduction

A 30-year old female presents to a dental office for an initial evaluation. Her medical history was unremarkable, and she was in very good dental health. A clinical and radiographic examination was performed revealing no periodontal probing depths greater than 3 mm, and there was no evidence of dental caries. Moderate to severe wear on teeth # 21, 22, 27, and 28 was noted. The patient initially denied any parafunctional habits. She was informed about the wear on her teeth and counseled on bruxism.

Upon her return for a six-month examination, the health history review revealed that her physician had made a diagnosis of Obsessive Compulsive Disorder (OCD). The patient recounted a history of being imprisoned by a bizarre set of rituals, one of which was tapping and clicking her teeth. If she did not tap her teeth 8 times prior to answering a question on an exam she feared missing the question. Also, when driving a car prior to changing lanes she would tap her teeth twice. The consequences of not performing these rituals would change daily. Her most often cited consequence was harm to a family member or loved one. A decision to delay elective restorative treatment was agreed upon with the patient. After several months of drug and behavioral therapy with her physician, the patient returned to complete her dental treatment.

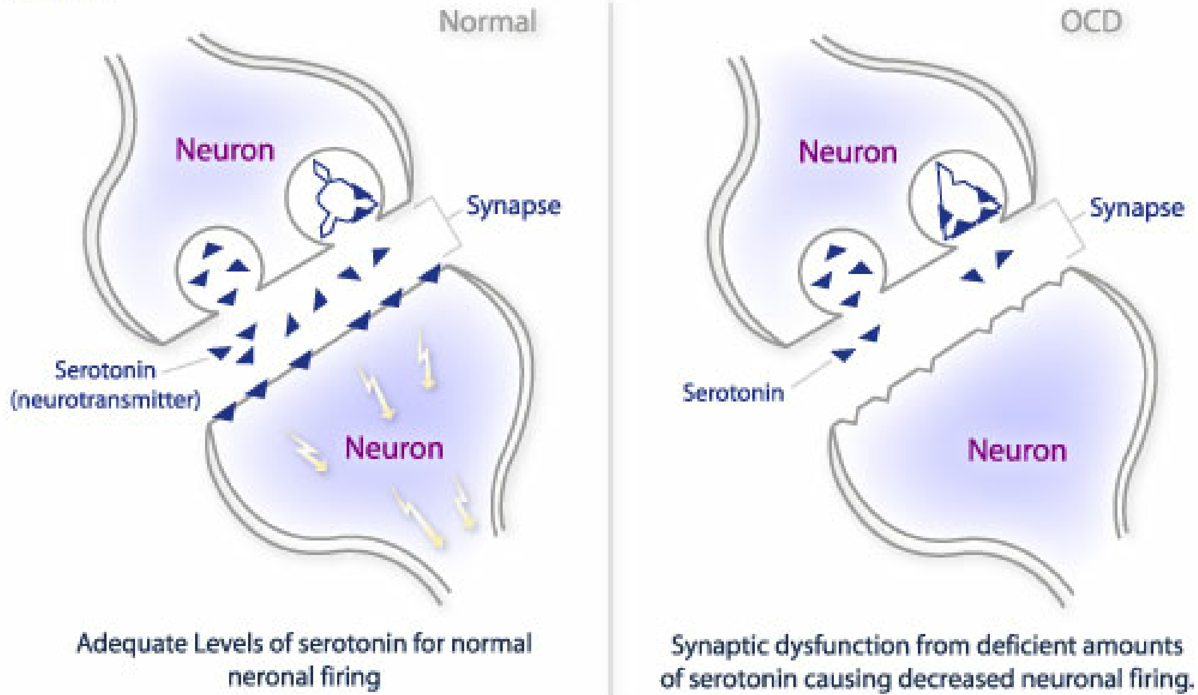
Discussion

OCD strikes 1 in 50 people during their lifetime.[1] It occurs with equal frequency in men and women and research suggests that OCD has familial tendencies.[2] The illness commonly presents with multiple obsessions and compulsions.[1] Typically people suffering from OCD experience unwanted thoughts and habits, and they characteristically perform bizarre rituals.[2] They feel that bad things will happen to them or their family members if these rituals are not carried out in an exact manner.[2] In its less severe form, OCD is an illness that wastes the patient's time and often interferes with their quality of life. In the most severe form, this disorder can be very debilitating to both the patient and their family.

Comorbidity is common with OCD, coexisting with other disorders such as anxiety disorders, affective disorders, and substance abuse.[1,3] The diagnosis of OCD is specific and should not be made until other psychiatric disorders have been ruled out. The symptoms should be isolated to be sure they are not manifestations of other disorders such as major depression, mania, schizophrenia, eating disorders, or preoccupation with food.[4] For example, a comorbid depression can result from the fatigue and anxiety associated with trying to keep up with the constant demands the OCD presents.[3]

OCD has two components as the name implies. The "obsessive" component manifests as recurrent thoughts, ideas, or images that are a disruptive force in the sufferer's life. These obsessions are involuntary and result in the "compulsive" part of the disorder.[1,14] The compulsions are then played out in response to the obsessions in an attempt to relieve the subsequent mounting anxiety. Patients may be aware they are performing these rituals but are unable to stop themselves from following through with the associated compulsion.

There may be several different subtypes of etiologies for the development of OCD.[9] The pathophysiology of OCD is a dysfunction in corticospinal pathways of the central nervous system.[10,11] Research has shown that OCD is associated with deficient amounts of the neurotransmitter, serotonin, in the basal ganglion and communicating regions of the subcortical structures.[5,12] (Figure A) As a result, synaptic dysfunction in the cortical inhibitory and excitatory mechanism occurs, leading to the obsessive-compulsive behaviors. Other research has supported the finding of basal ganglion involvement in some children associated with an autoimmune response to streptococcal infection.[6]



Adequate Levels of serotonin for normal neronal firing

Synaptic dysfunction from deficient amounts of serotonin causing decreased neuronal firing.

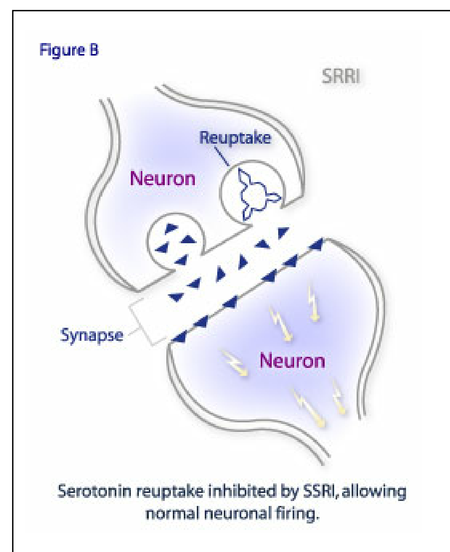
Dentists should be aware of the signs, symptoms, and clinical treatment of OCD so proper dental management can be followed. Many patients may be reluctant to talk about the specifics of their problem. A thorough discussion of the disorder and a consultation with the patient's physician is prudent in cases where complex dental treatment is required.

Signs and Symptoms

Patients with OCD may or may not have outward manifestations of this disorder.[1-4] By definition, OCD patients have obsessions that cause them to perform certainacts or rituals compulsively. (Table 1)[2] These compulsions can manifest in a verbal, subvocal, or physical manner. A commonality found in all OCD patients is an obsessive-compulsive behavior with numbers. Most patients have an obsession with performing their compulsions a certain number of times.[2] The act of taking an obsession to the next level and acting on that obsession is where the patient's therapist attempts to break the cycle of this mal-behavior. Frequently patients suffer from depression in addition to OCD. Often patients are successfully treated with behavior modification directed by a therapist.

In more severe cases, drug therapy in combination with behavior modification is needed. Drug therapy (Table 2) is most often accomplished with selective serotonin reuptake inhibitors (SSRI's).[7,8] (Figure B)

Neuroimaging studies have shown a change in brain function following SSRI therapy.[13] SSRI's have associated side effects. The side effect most pertinent to dentistry is xerostomia.[14] Patients with xerostomia may need to have a shorter recall interval and must maintain excellent oral hygiene. Fluoride rinses and gels, as well as intraoral moistening agents may be prescribed for caries management. As always, before prescribing any medications in the course of dentistry, a screening for drug interactions must be performed to preclude any untoward effects with SSRI's.



Serotonin reuptake inhibited by SSRI, allowing normal neuronal firing.

Table 1. Examples of Signs and Symptoms	
Obsessions	
Germs, contamination	Fears of contracting an illness. Fear or revulsion of body waste.
Obsessions with aggresive content	Fear of harming others or self. Violent thoughts
Sexual images	Sexual thoughts that are considered inappropriate.
Religious obsessions	Sacrilegious images and Blasphemous thoughts
Need for symmetry	A need to align objects. Obsessed about neatness
Hoarding	Saving trash, newspapers and other items.
Nonsensical doubts	Fear that one has failed to do something.
Repetitive rituals	Repeating phrases, words, or routines.
Superstitions	Example: believe certain numbers are lucky
Compulsion	
Cleaning and washing	Repeatedly wash, fear of touching objects
Checking compulsions	Counting, repeatedly performing acts Repeated arranging of items
Hoarding	Accumulating worthless objects
Having things just right	Symmetry, Need to keep doing projects over
Miscellaneous	Need to tap or touch certain objects Mental rituals: Counting ritual, Repeated praying, Excessive list making, Blinking or staring rituals

Table 2. Common OCD Drugs		
		Recommended dose
Fluvoxamine	Luvox	100mg-300mg/day
Paroxetine	Paxil	40mg/day
Sertraline	Zoloft	25mg-200mg/day
Fluoxetine	Prozac	20mg-60mg/day

Summary

The objective of the general dentist is to provide quality patient care. To achieve this end, a dentist treating a patient with OCD must understand the disorder and be able to manage the patient effectively. The treatment plan and management of patients can often be the most complex part of dentistry. A simple restorative case that can become a challenge with OCD patients can also be well managed with knowledge and preparation.

The American Psychiatric Association (APA) web site (http://www.psych.org) is an excellent source for obtaining more information about OCD. The mailing address forthe APA is:

American Psychiatric Association
1400 K Street NW
Washington, DC 20005
(888) 357-7924
FAX 202-682-6850

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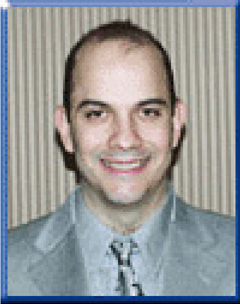

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