

Obsessive compulsive disorder leading to unusual dental damage

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مرض الوسواس القهري (الالتزام المفرط) هو اضطراب نفسي يتميز بتسلط أفكار أو مشاعر تسلطاً مقلقاً وقد تكون مصحوبة بأفعال قسرية أو اكراهية مما قد يسبب ألماً أو أذى أو خطراً على المريض .

الوسواس القهري ليس بالظاهرة الغريبة بين الأطفال ، حيث يشكل الأولاد ٦٦% من الحالات و ٣٠% من المرضى تقريباً يبدأ المرض عندهم من عمر ٥ إلى ١٥ ، على أي حال نسبة المرض تتراوح ما بين ٢ إلى ٣% من السكان . هناك اثنين من أكثر الأعمال القسرية شيوعاً هما " تنظيف الشهيء مراراً وتكراراً " و"إعادة فحص الشهيء لعدة مرات " . الأطفال الذين يعانون من الوسواس القهري يتصرفون عادة تصرفات غريبة مثل تفريش الأسنان بكثرة مما يؤدي إلى تضرر اللثة أو الأسنان أو الغشاء المخاطي للفم وآخرون يعانون من زيادة إفراز اللعاب مما يؤدي إلى تخلصهم منه بالبق وفي السنوات الأخيرة اقترنت فكرة البصق باستمرار بفكرة إزالة جراثيم الإيدز من الفم . لقد ندر في الأبحاث ذكر حالات إزالة أجزاء من التجويف الفموي مثل حلع الأسنان وحلأفه كتصرف غريب أو مناف للعقل ، وهذا عرض لحالة طفل عمره ١٠ سنوات قام بنفسه بخلع (٥) من أسنانه الدائمة وسنين مؤقتين وذلك بسبب إصابته بمرض الوسواس القهري .

ويشمل المقال أيضاً التعرف على المعطيات السنية والعلاج السني للمرضى الذين يعانون من مرض الوسواس القهري إضافة إلى تقديم ما قد يسببه المرض من تلف لأسنان أو أجزاء الفم الأخرى .

Obsessive compulsive disorder (OCD) is a psychiatric disorder characterized by obsessive thought and/or compulsive action that cause(s) distress and impairment in social interaction and performance.

OCD is not a rare condition in children. Its prevalence range is from 2 to 3% in the general population, with 66% being boys. Approximately 30% of these patients experience an onset between the ages of five and fifteen years. Two common types of compulsive activity are obsessive 'cleaning' and 'checking.' Children with OCD typically display bizarre behavior patterns that involve orofacial structures such as practicing excessive or ritualized tooth brushing that results in abrasion of the oral mucous membrane and teeth. Others may be mentally terrified by body secretions including saliva as manifested by continual spitting. In recent years, this obsession has come to include repeated spitting to remove the AIDS germs from the mouth. The literature has rarely reported cases of removal of body parts such as teeth as a ritual of alien and absurd behavior. This paper presents a case of a 10 year-old boy, who extracted by himself seven of his own teeth, five of them being permanent. He was under psychiatric treatment for OCD. The purpose of this paper is to shed light on recognizing dental findings in and dental management of children with obsessive disorder, including other oral destructions due to obsessive compulsive behavior.

Introduction

Obsessive-compulsive disorder (OCD) is the fourth most common psychiatric disease.¹ An obsession is a content of consciousness, an idea, an impulse to act or an emotional state, which when it appears, is accompanied by a subjective feeling of compulsion, which the patient tries to resist but cannot get rid of.² The tendency to resist the obsession is the most important and characteristic feature. Obsessive thoughts tend to be recurrent and often are associated with a great deal of anxiety and distress and sometimes with secondary depression. In some patients, the obsession symptoms and the associated distress occupies most of their daily lives. In others, the

obsessive symptoms come on intermittently with intervals of comparative freedom.²

The term compulsion is applied to an obsession impulse to carry out certain acts, such as having to do things in a certain way, or to repeat them a certain number of times or to touch various objects.² Two of the most common types of compulsive activity are 'cleaning' and 'checking.' Excessive or ritualized hand washing, showering, or grooming is the typical response to a grossly exaggerated fear of contamination.³ Other activities may include obsession doubting, bodily fears and hoarding.

The National Institute of Mental Health documented the lifetime prevalence of OCD to be 1.9 percent to 3.3 percent in the U.S. population and 1 to 3% of the population in cross-cultural studies.⁴ Although most research on OCD pertains to adults, studies of the disorder in children and adolescents have risen over the last decade. A

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review of the literature suggests that OCD has a bimodal incidence pattern with one peak of onset at approximately 10 years of age and another during adulthood. In addition, the juvenile and adult forms are equally prevalent with an early-onset disorder being more male predominant,⁵ whereas the overall adult disorder is more common in females.⁶

Family studies suggest that at least some forms of OCD have a familial predisposition. Mahgoub et al⁷ described a pair of monozygotic male twins from Saudi Arabia with OCD who also suffered from grand mal epilepsy.

Patients with OCD who present fear of contamination with germs may display bizarre behavior patterns that involve the orofacial structures. Those who are obsessed with washing their hands may neglect brushing their teeth because they are either not interested or preoccupied to perform oral hygiene procedure. Others are so intent with oral cleanliness that they practice excessive or ritualized tooth brushing, causing abrasion of the teeth and the oral mucosa.⁸

Gingival recession as a result of regular tooth brushing has been reported in adults⁹ and in young populations.¹⁰ Localized gingival lesions termed 'gingivitis artifacta minor' were reported to be due to the overzealous tooth brushing habits.¹¹ Gingivitis artifacta major lesions are generally the consequence of compulsive behavior.¹² Other localized or extensive gingival lesions were reported associated with self-inflicted injuries such as tooth pick, fingernails and other materials.^{13,15}

Review of psychiatric literature has long noted that patients with OCD may be terrified of body secretions, including saliva and this condition is manifested by continual spitting.¹⁶

More serious bizarre behaviors are reported in psychiatric literature and may vary from removal of part of the body such as hair to more severe manifestation such as self-induced ethmoidectomy.¹⁷ The case report presented here is a type of OCD that led to unusual dental damage.

Case Report

A ten year old Saudi boy came with his mother to the emergency dental clinic at the College of Dentistry, King Saud University in Riyadh. The mother requested reimplantation of five missing anterior teeth that the boy had extracted by himself during the previous two nights. He

removed two teeth the first night and three others the following night. The mother indicated that he previously complained of a toothache. However, upon examination, a dentist assured her that his teeth were healthy. She also stated that he was under psychiatric care.

Upon examination, the boy appeared physically healthy, showed mixed emotions, smiling at times (Fig. 1) and angry minutes later. When he was asked why he extracted his teeth, he showed resentment and indicated he did not want to do so but they were painful and wanted to get rid of the pain. Later on he declared that he removed his teeth because he felt pain and since his parents did not pay him attention, he had the compulsion to extract them.

The patient presented with alveolar sockets of five recently extracted teeth, which were four mandibular permanent incisors and one deciduous canine (Figs. 2 & 3). The extracted teeth had been preserved in milk by the mother.



Fig. 1. Depressed lower lip of 10-year old boy who extracted five of his lower anterior teeth by himself.

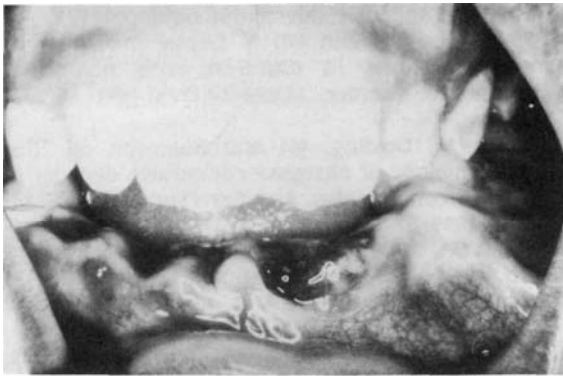


Fig. 2. Alveolar sockets of teeth self-extracted on previous nights.



Fig. 3. Extracted teeth: four mandibular incisors & one deciduous canine.

The dental treatment decision was made not to reimplant the teeth because of the real possibility that he might remove them again. This was later confirmed on an emergency psychiatric visit, one month later, when he had removed two deciduous molars and threw them away and also cut his tongue. In addition, some of the teeth had been removed for more than 48 hours. It was also decided that fixed prosthesis should be postponed until he responded positively to medical treatment.

Psychiatric consultation provided a history that the boy was doing fine until six months prior to the present incident, when he started to change his clothes frequently, complaining that they were not clean. He also washed his hands excessively as he felt that they smelled bad. At times he was stubborn and angry when his needs were not met. He showed no aggressive behavior or verbal abuse, but he displayed signs of anxiety. Both parents were judged to be anxious. During psychiatric follow-up visits, he showed symptoms and signs of clinical depression. The psychiatric

evaluation indicated that this child had an obsessive compulsive disorder (OCD) associated with secondary depression. He responded well to Clomipramine oral medication.

Discussion

Dental findings in OCD may include abrasion of the oral mucosa and teeth due to excessive brushing and continual spitting to get rid of contamination. In recent years OCD has come to include fears of contracting HIV.^{18,19} Approximately 20% of OCD patients manifest chronic multiple motor tics. These tics may present as spasmodic grimaces of the facial muscles and involuntary blinking of the eyes.³

Treatment of choice is with a tricyclic antidepressant (e.g. Clomipramine), but it may cause xerostomia, which may lead to a rapid progression of dental caries and periodontal disease.³ Reports on OCD from Arab and Muslim countries are few, but were found to be similar to various other cultures with regard to age of onset, level of functioning, type of onset, course and comorbidity. Scrupulous religious obsessions and compulsions were found to be the most common clinical features.^{7,20}

Dental literature presents various accounts of self-inflicted bodily harm by patients with OCD but self-extraction of teeth has not been previously reported. However, Paterson and Watson reported a case of obsession neurosis resulting in extensive wear of acrylic denture teeth caused partially by prolonged match chewing.²¹ Echeverria et al²² reported a case of compulsive brushing for several weeks in an adolescent patient because of emotional stress.

Dentists may be the first to recognize children with OCD when they present with severe loss of tooth structure or bleeding gums secondary to repetitive brushing.³

Symptoms of OCD may overlap with other neuropsychiatric diseases or syndromes such as anorexia nervosa and Gilles de la Tourette's syndrome (TS) which may also begin in childhood or adolescence.³ Tourette's syndrome is characterized by chronic motor and vocal tics and behavioral disorders.²³

Many of the orofacial tics and compulsive behaviors are also seen in TS and may cause destructive oral lesions. Therefore, OCD should be differentiated from TS.²⁴ Stress and demands of dental visits may exacerbate the tics and aberrant behaviors of TS patients also. Those patients with

TS and taking haloperidol, may show side effect of tachycardia, fluctuations in blood pressure and orthostatic hypotension, together with xerostomia.²⁴ Perioral movements in TS may be severe as to lead to the loosening and exfoliation of permanent teeth and to the development of chronic non-healing lip and mucosal ulcers. It was also reported that compulsive touching and manipulation of the oral structures could be extreme and can lead to abraded and friable gingiva and self-extraction of teeth.^{25,26} However, the case we have presented does not have the main features of TS and thus presents a unique reason of tooth loss by self-mutilation.

Obsessive compulsive disorder should also be differentiated from compulsive habits which are factitious lesions from conscious, repetitive, uncontrolled actions including neurotic excoriations (self-induced lesions by fingernails), trichotillomania (compulsive pulling out of one's hair) and lip licking dermatitis.²

Dental management of suspected OCD patients should include a comprehensive evaluation of orofacial structures and assessment of ability to perform daily oral hygiene procedures and ability to withstand dental treatment.²⁴

Consultation with other dental specialists and psychiatric consultation, including psychological evaluation of the patient's status are necessary.

Side effects and drug interactions for proposed dental drugs such as local anesthesia should be obtained through psychiatric consultation. Routine dental treatment such as scaling, root planning and restorations may be performed. Effective local anesthesia and recall visit every three months are mandatory. Any deterioration seen in the oral health may indicate a recurrence of OCD and this matter should be discussed with the treating psychiatrist to evaluate the needs of the patient.²⁴

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