

## **Dental Problems Associated with Disordered Eating**

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Eating disorders such as anorexia nervosa and bulimia nervosa are often diagnosed and treated by doctors, psychiatrists and psychologists. However, did you know that over one quarter of all incidences of diagnosed bulimia nervosa is first identified by dental professionals? This statistic demonstrates the influential role that dental practitioners can have in the lives of individuals who are suffering from eating disorders. The dental team may be the first to recognize signs of an eating disorder due to the various oral complications that are associated with the condition. Since many individuals affected by eating disorders often avoid medical treatment, the roles of dentists and hygienists in the lives of such individuals can be critical.

### **Erosion of tooth enamel**

Oral complications of eating disorders are most commonly found in individuals who engage in frequent vomiting. The most widespread problem related to recurrent vomiting is the erosion, or breaking down, of tooth enamel, which is the protective outer layer of the teeth. Since vomit contains gastric (stomach) acid, repeated purging eventually wears away an individual's tooth enamel. This usually occurs on the inner surface of the front teeth within the first six months of regular vomiting. Since this is a surface which is usually only inspected by dental practitioners, eating disorders may go unnoticed by other health professionals, while dentists and dental hygienists will most likely spot the erosion.

Over time, and as the illness progresses, erosion on the front of the teeth may become noticeable, and teeth will often appear thin, yellow, shiny and perhaps even transparent near the tips. While tooth erosion is experienced by nearly 89%

of individuals with bulimia, it may also be evident in individuals with anorexia as a result of the consumption of acidic fruits and drinks used to provide nourishment or a sense of satiety.

Individuals with eating disorders often complain of tooth sensitivity.

Hypersensitivity to hot and cold temperatures is often a result of the erosion of tooth enamel. With the protective barrier now worn away, the inner layer of the tooth becomes exposed. As such, brushing one's teeth, drinking a glass of water, or even taking a deep breath through the mouth can become extremely painful.

### **Effects of dehydration and malnourishment**

While tooth erosion is one of the most common dental complications associated with eating disorders, several others may be reported as well.

Dry mouth tends to be a concern for individuals with both anorexia and bulimia since their bodies are often dehydrated. Individuals who purge tend to be especially plagued by dry mouth as a result of laxative and diuretic misuse and recurrent vomiting.

Bad breath is also a common problem for those with eating disorders as their bodies tend to be malnourished and are not being provided with adequate amounts of the necessary minerals, vitamins and proteins essential for keeping the body and oral cavity healthy.

Individuals who have had an eating disorder for an extended period of time may also develop osteoporosis, a condition that leads to the weakening of bones.

Most often found in individuals with anorexia, the bone density in the jaw may shrink, causing the individual's teeth to loosen and possibly fall out.

### **Tooth decay, soft palate damage and salivary gland enlargement**

There are three oral complications most closely associated with individuals suffering from bulimia. These are tooth decay, soft palate damage and salivary gland enlargement.

Bacteria use excessive sugary, carbohydrate-rich foods trapped on the teeth, resulting in tooth decay. Following a binge, individuals with bulimia will often stick fingers or foreign objects down their throats to induce vomiting. As a result, redness, scratches and cuts often appear inside the mouth, especially on the upper surface commonly referred to as the 'soft palate.' Such damage is a warning sign for dental professionals, because healthy daily behaviors rarely cause harm to this area. Soft palate damage is often accompanied by cuts or bruises on the knuckles as a result of an individual's teeth placing pressure on the skin while attempting to purge. Finally, a frequent binge and purge cycle can cause an enlargement of the salivary glands, a symptom which can be particularly bothersome for individuals with bulimia. Enlarged glands can be painful and are often visible to others, a situation which may prove to be emotionally disturbing for individuals with eating disorders who may already be self-conscious about their appearance.

### **Strategies to improve dental health**

Given these potential problems, there are several recommendations that a dentist may provide for the maintenance of dental health for individuals with eating disorders. For example, brushing daily with desensitizing toothpaste that also contains fluoride will not only treat and prevent hypersensitivity, but will also help keep enamel strong thereby preventing decay. For individuals who vomit frequently, a fluoride rinse can be used immediately following brushing to provide greater protection to the teeth. Individuals with bulimia should take extra care to rinse their mouths with a sodium bicarbonate mouth-wash following an episode of purging in order to neutralize the acidity in the mouth.

As well, appropriate amounts of calcium and vitamin D will help to maintain healthy bones - including the jaw. Lastly, daily flossing will prevent build up of food and bacteria between teeth, thereby preventing decay, while choosing water, milk or tea instead of highly acidic fruit juices or sugary sodas will help to keep teeth stronger and healthier.

### **The importance of dental check-ups**

Since the dental problems associated with eating disorders such as erosion of enamel, tooth decay or cavities and soft palate damage may not be noticeable to the untrained eye, regular dental appointments are crucial to ensure oral health.

Unfortunately, many individuals with eating disorders fear going to dental professionals because of their ability to discover symptoms. Women and men with eating disorders often live in secrecy about their eating disorders, and may be worried about revealing to others behaviour that is experienced as shameful. They may feel ambivalent about letting go of their symptoms, and may not want to tell a medical professional about their eating disorder. However, many individuals with eating disorders minimize the physical consequences of their symptoms and confronting the possible damage to their teeth may assist them in acknowledging the severity of their problem.

One healthy strategy to deal with these fears is to confront the fear, feeling it and perhaps talking about it with a trusted friend, and going to the dentist anyway. Avoiding addressing dental problems will not make them go away. In fact, untreated dental problems only worsen with time.

Friends or family members of the individual with an eating disorder can help by supporting the person through the fear and the process of booking and attending regular dental appointments.

## **Breaking the silence**

A receptive and understanding dental staff may be the first step on the road to treatment and recovery. It is important that dental practitioners know not only the symptoms, but also understand the dynamics of an eating disorder. The behavioural challenges of an eating disorder cannot be fully addressed without looking at the underlying issues. Dental practitioners may be in a unique position to provide their patients with non-judgmental support which can be instrumental in encouraging the individual to seek help to recover from the eating disorder.

Upon recognizing symptoms, dental professionals should engage the patient in a discussion in a non-threatening manner, identifying the problems and explaining that these are often seen in individuals with an eating disorder. Of course, dental professionals need to look for more than one symptom prior to addressing patients, since one symptom may have various causes that can be unrelated to an eating disorder (for example, tooth decay is also a result of improper brushing and the constant consumption of candy and sweets).

While there are many practices one can adopt to maintain a healthy smile, the best gift that individuals with eating disorders can provide for their teeth and their selves is appropriate treatment. Without help, restorative dental procedures will likely continue to be interrupted by the harmful behaviors of eating disorders.

Regardless of whether an individual is in the early or late stages of an eating disorder, it is never too late to begin making better choices about dental and overall health.

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