Tooth wear: The impact of an eating disorder

In the second of a five-part series, **PROFESSOR ANDREW EDER** tackles the challenging issue of discussing oral health symptoms that indicate a patient may be bulimic, and explores the first stages of remedial dental treatment...

QUESTION: I saw a new patient recently who presented with tooth wear that indicates she has been bulimic for a considerable amount of time. She is 50-years-old and has a heavily restored dentition; many of her teeth are now failing.

I was wondering how to approach such a sensitive case; what advice can you give on how to broach the subject with the patient and what treatment is needed?

Answer: Unfortunately, eating disorders are by-products of the body conscious society in which we live. Bulimia nervosa is more common than anorexia nervosa; however both often start in early adolescence and are sadly rising in prevalence.

The extended periods of intentional vomiting instigated by bulimics have considerable impact on a patient's dentition and can result in substantial oral health complications, including:

- The teeth can become sensitive; rounded; smooth and shiny; and lose their surface characteristics.
- Incisal edges appear translucent and may start chipping as they become thin.
- Cupping develops on cusp tips as the enamel is lost and the dentine wears away more rapidly.
- Cervical lesions are shallow and rounded.
- Fillings tend to be unaffected by erosion and will therefore stand proud of the surrounding tooth tissue.
- Gaps can develop at the edges of crowns where erosion may continue.

Discussing bulimia

A staged approach, starting with a non-judgmental and sympathetic discussion, is best. It is essential to share examination findings with the patient and explain how their symptoms are linked. Aim to make the patient feel comfortable and not intimidated, assure them you have time to talk things through and gently ask questions aimed at encouraging the patient to identify the origin of their oral health problems.

Denial and shame are strong features of eating disorders, which mean the patient may not readily admit to such behaviour. If this is the case, explain that these signs are often attributed to excessive acids in the mouth and initially explain that acids can either come from foods and drinks in the diet or from stomach acids. Having excluded dietary causes, the patient will normally engage in a sensible discussion about stomach acids, perhaps at first staying away from any discussions about eating disorders.

In time, and perhaps not at the first visit, and when explaining more about the pattern of erosive tooth surface loss, remind the patient that you are there to help and that addressing the cause is crucial for any management and subsequent treatment to be successful.

Cultivating a trusting relationship will facilitate an open dialogue during the patient's illness and provide extra motivation when it comes to trying to reduce habitual vomiting and following health-related advice. What is clear is that an eating disorder can span many years, and often goes through quiet and active phases; and dental professionals must be supportive throughout.

The first stages of treatment

Once trust is built and dental treatment begins, motivation will hopefully continue to grow as the patient experiences pain relief, reduced sensitivity and aesthetic improvements.

In the case of eating disorders, a multidisciplinary approach to dental treatment is often indicated. This may involve liaising with the patient's general medical practitioner to address issues such as acid reflux caused by a hiatus hernia or dry mouth caused by prescribed medications such as antidepressants. Referral to a nutritionist and/or working with a psychiatrist to determine the patient's mental health status can be of benefit in assessing dental disease risk moving forwards.

Advice rather than treatment features heavily during the initial stage of helping a patient suffering with bulimia.

Diet analysis and general guidance on how to reduce the effect of acidic foods and drinks should be given and might include:

- Drinking water or low fat milk in preference to more acidic liquids.
- Using a straw positioned toward the back of the mouth when drinking acidic beverages.
- Avoiding swishing any acidic drinks around the mouth.
- Rinsing the mouth with water or fluoridated mouthwash after consuming acidic foods or drinks.

Oral health advice for a patient whose dentition is compromised by bulimia includes:

- Issuing a fluoride rinse or gel and prescribing a high-fluoride toothpaste for daily use.
- Not brushing immediately after vomiting or consuming acidic foodstuffs, but rinsing with a fluoridated mouthwash and chewing sugar-free, xylitol-sweetened gum afterwards.

Take early action

Extra protection can be provided via calcium and phosphate ions, such as those found in GC Tooth Mousse, helping to restore the mineral balance; neutralise acidic challenges; and stimulate salivary flow.

In addition, study casts and photographs aid in monitoring wear and can enhance communication of any professional concerns with the patient during treatment.

Compliance may be difficult to achieve and definitive restorative treatment in the presence of ongoing tooth wear is considered unwise but, irrespective of this, the damage caused by erosion means it may be necessary to take early action to protect and conserve the remaining tooth structure, for example:

- Direct application of adhesively-retained filling materials (eg. glass ionomer or composite resin) to sensitive areas may be indicated.
- A soft mouthguard can protect the teeth during vomiting.
- An alkali or fluoride gel placed within the fitting surface of the guard to neutralise any acid pooling may be helpful.
- The mouthguard should not be kept in after vomiting in order to avoid holding any acids that may have leaked into the mouthguard against tooth surfaces at risk.

Conclusion

The bottom line is that patients showing signs of an eating disorder need to be treated with sensitivity and understanding, and emphasising the potential for oral health improvement should provide a good incentive to make changes to eating habits.

Difficult as it is to broach such a subject, communication is the key to achieving any level of success. The earlier you and your patient can form a partnership to tackle this distressing and destructive psychological problem, the better your chances of a good outcome for the patient and the professional team. ■

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The London Tooth Wear Centre offers an evidence-based and comprehensive approach to managing abrasion, attrition and erosion. It promises to utilise the latest clinical techniques and a holistic approach in a professional and friendly environment.