Tooth wear: Your questions answered

In the first of a five-part series, **PROFESSOR ANDREW EDER** answers your questions on the subject of tooth wear in general practice...

QUESTION: I have a 25-year-old female patient who suffers with acute sensitivity. Medically, she is healthy and, is in fact, a championship swimmer. I suspect, however, that the latter has something to do with her complaint. What advice can you give for dealing with the problem; both from a diagnosis point-of-view, and in terms of treatment?

Answer: There are many causes for acute sensitivity. But, in very broad terms, it is either because of pulpal inflammation, giving rise to altered sensation; or, alternatively, it is due to the proximity of the insult to the pulpal tissue, due to caries, tooth surface loss, periodontal disease or even trauma. Very often, it will be a combination of two or more of the above.

In order to manage this concerning sensitivity, it is essential to first determine how many teeth are involved; how long the problem has been present; and then to arrive at a diagnosis, albeit a provisional one in the first instance until more information becomes available.

If there are caries or an irreversible pulpitis, then conventional treatment should be instigated without delay. If, however, tooth surface loss is identified as the cause, then a short- and a longer-term treatment plan should be agreed and instigated.

If swimming is highlighted as a potential aetiological factor for the loss of enamel or dentine, contact with the water will need to have taken place very regularly, over a long period of time (ie. almost daily swimming for many years).

Please rest assured that this is not seen in the casual or social swimmer, so I wouldn't suggest that anyone cancels their holidays quite yet! Although chlorine is often highlighted as the cause, chlorine is a gas, and it is rather chlorine-containing substances, rather than chlorine itself, that will be implicated. But, the pH does not fall significantly below the erosive danger level, otherwise significant skin problems would also be seen.

The short-term plan would normally include symptomatic pain relief, with the removal of any causative agents, if these can be identified, as well as the application of desensitising pastes and even plastic restorative materials, as appropriate.

A longer-term plan might include the same, together with well-fitting mouthguards, filled with fluoride-containing toothpastes, or similar, as well as the provision of rather more substantial protective restorations, as necessary.

The key to success revolves around the correct diagnosis and also the rate of progression. This avoids treatment that may be more damaging than the disease itself, particularly in such a young patient. ■

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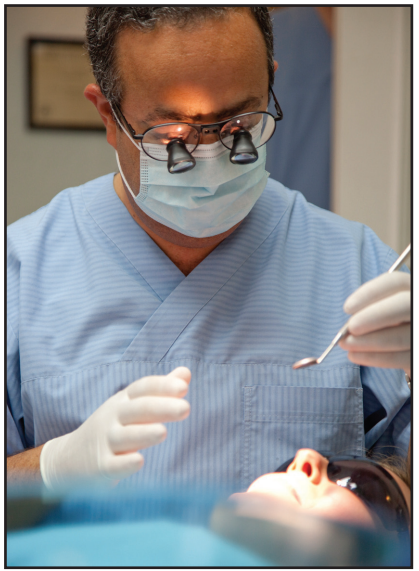

About the author

Professor Andrew Eder is a specialist in restorative dentistry and prosthodontics; and clinical director of the London Tooth Wear Centre, a specialist referral practice in central London. He is also director of Education and CPD at the UCL Eastman Dental Institute.

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.