

# CLINICAL

## Safe and sound

**Professor Andrew Eder navigates** through the best 'tooth wear' education tips that will help preserve the natural dentition for life

Thanks to medical advances, people are living for longer and, while time and education have allowed us better control over tooth decay and gum disease than ever before, tooth wear is an increasingly common dental problem.

Teeth do simply wear down or dissolve away as time passes. However, clinicians are now witnessing tooth wear beyond that which would be expected, given the patient's age. Too often we see abrasion of the enamel and dentine from, for example, over-zealous tooth brushing, attrition as a result of, perhaps, tooth grinding and clenching, and erosion, often the result of eating acidic foods and drinks or frequent regurgitation.

### Treatment to repair or protect damaged teeth

1. A Michigan splint – normally for night-time wear
2. Additional prescription of muscle relaxants for a specific period
3. Adjunctive treatment with a physiotherapist or osteopath with specialist knowledge of the temporomandibular joint (TMJ).

### Stressful living

Many of us lead busy and stressful lives, and it is not uncommon to discover grinding and clenching of the teeth at night is being caused – or exacerbated – by anxiety. If a patient presents with tooth wear that can be attributed to parafunctional activity, a Michigan-style splint would be the treatment of choice from a protective and/or diagnostic perspective. Other treatment to repair or protect damaged teeth may also be necessary.

However, if signs or symptoms of pain are additionally present, then a



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The London Tooth Wear Centre offers an evidence-based and comprehensive approach to managing abrasion, attrition and erosion, using the latest clinical techniques and an holistic approach in a professional and friendly environment. For more, visit [www.toothwear.co.uk](http://www.toothwear.co.uk), email [info@toothwear.co.uk](mailto:info@toothwear.co.uk) or call 020 7486 7180.

broader triad of treatment may be more appropriate. A Michigan splint will normally protect against parafunctional activity and TMJ pain by creating the most 'ideal' biting arrangement and allowing the mandible to assume a comfortable and reproducible position. Whilst unlikely to prevent the habitual grinding pattern that may have developed, this appliance will protect against potential damage to the teeth and also maintain a level of comfort dependent on maintaining harmony between the TMJs, the muscles of mastication and the guiding surfaces of the teeth.

### 'Healthy' foods

One way in which dental health can be affected is with the consumption of drinks believed to be good for the body but, in truth, contribute to tooth surface loss. Drinks with an acidic pH that can worsen tooth wear levels include certain sports drinks, fizzy diet drinks and fruit juices.

Acidic foods cause similar problems. Patients need to know that a number of foods generally considered to be 'healthy' have a low pH. Culprits that patients may find surprising include certain yoghurts, honey and quinoa.

### Help patients to help themselves

- Drink still water or low fat milk between meals
- Limit fruit juice to once per day and avoid fizzy drinks
- Rinse the mouth with water for 15 to 30 seconds after consuming acidic foods or drinks
- Chew sugarfree gum or eat a piece of cheese after consuming acidic foods or drinks
- Wait at least an hour to brush teeth after consuming any acidic foods or drinks
- Use a non-abrasive toothpaste that contains 1400ppm fluoride and a non-abrasive toothbrush
- Use a fluoridated mouthwash every day at a different time to tooth brushing, as well as before or after acidic foods and drinks, to help limit the erosive potential.

### Eating disorders

The extended periods of intentional vomiting suffered by bulimics have considerable impact on the dentition and can result in substantial oral health complications. Denial and shame are strong features of eating disorders, so the patient may not readily admit to their behaviour. Because of this, it is important to share examination findings with the patient with sensitivity, explaining what typically causes excessive acid in the mouth. 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 sugarfree, xylitol-sweetened gum afterwards.

### Take action

Early diagnosis of tooth wear is essential so that simple treatment, including monitoring and prevention, may be provided to help patients achieve enamel and dentinal longevity. Left in the dark, patients are likely to continue in ignorance with their destructive habits, which will have serious implications for their oral health in years to come and may even require extensive restorative treatment. **D**



**Left in the dark, patients are likely to continue in ignorance with their destructive habits, with serious implications for their oral health in years to come**



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By Paul Scott | June 2013 | Evident Latest News

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### Let there be light – an Optician's view

You will no doubt have experienced the daily difficulty of achieving adequate illumination of your patient's mouth.

Poor illumination and insufficient lighting can affect your working position and posture whilst limiting the ability of any magnifying device to provide adequate depth of field and resolution of detail. We advise that to maximise the effectiveness of any magnification system, a dedicated concentric loupes-mounted light should also be considered.

Our natural pupil/iris forms an important part of any viewing system. Without adequate lighting you will have a dilated pupil and are likely to achieve significantly less than the maximum depth of field your loupes may be designed to provide. Here are a couple of examples:

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**Dentist B** found they were always having to adjust their overhead light and move into an uncomfortable position in order to be able to see and illuminate objects when using their dental mirror, resulting in neck and back pain. A loupes-mounted light solved this problem.

Consideration should be given to light intensity, it should not be too powerful as this can lead to eye strain and fatigue, even causing after-images (camera flash effect). It's also ideal to consider the hue or colouration, as this may influence the appearance of tooth structures and the pallor of soft tissues when viewed under cool/blue lighting.

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