

# Tooth wear – where are we now?

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In this themed issue, we explore the extensive topic of tooth wear, bringing together a comprehensive range of papers, covering aetiology, diagnosis and management of patients affected by the condition. We are grateful to our colleagues, who are all leading clinicians and academics, for contributing their knowledge and experience in each subject.

Patients with tooth wear present with a range of signs and symptoms of the condition, from mild tooth wear, perhaps only requiring relatively simple management with prevention and monitoring, to moderate and then severe generalised tooth wear, often much more complex to plan, treat and maintain. Treatment often involves several lengthy appointments, and these can be challenging for both the patient and the clinical team. In addition, the cause of the tooth wear, frequently multi-factorial but often predominantly due to either parafunction or erosion, may continue after restoration, leading to an ongoing maintenance burden for both the patient and the clinical team.

The issue begins with an overview of the aetiology and epidemiology of tooth wear, by Leven and Ashley. The condition appears to affect patients of all ages and in all populations studied, with an apparent increase in both incidence and prevalence. The causes, now commonly understood to involve erosion, attrition and abrasion, will affect individual patients differently. Careful examination and often potentially sensitive discussions with the patient, are required. Anderson and Gopi-Firth, give their insight as psychiatrists involved in eating disorders services in Scotland, highlighting the complex aetiology of the disorders. The authors discuss the clinical and dental presentations and offer useful guidance to the dental team, on how to

collaborate with the patient's general medical practitioner and the local eating disorder support network. The role of erosion within tooth wear is recognised but the medical aspects related to this are perhaps not well understood by many in the dental profession. Howard and colleagues provide an overview of the gastro-intestinal conditions related to tooth wear, specifically gastro-oesophageal reflux disease (GORD), and inform readers of the anatomy, terminology and treatment for these conditions. Davies and Beddis share their considerable experience of bruxism



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and TMD and how these relate to the development of tooth wear. As bruxism is a risk factor for tooth wear and a common cause of restoration failure, and patients can present with TMD at any stage, it is essential that the dental team are confident when diagnosing and managing patients with these conditions.

For a proportion of patients, tooth wear and the treatment required to manage the condition will significantly impact their quality of life (QoL). Mehta, Loomans and colleagues describe the impacts of the condition and what is now understood of the benefits of treatment.

Considering almost all patients affected by tooth wear will have either most or all of their care delivered by their general dental practitioner (GDP), it is important to consider and understand the thoughts of the primary care clinical teams. Ashley and

Leven present the outcomes of a series of interviews with experienced GDPs. Some of this may be controversial, and whilst it can never be representative of the opinions of the entire dental profession, the paper gives useful insight into the challenges faced by GDPs in this country.

O'Toole and colleagues lead us into the clinical management papers in this themed issue. As a majority of patients with tooth wear probably neither seek nor receive restoration of their worn teeth, the principles of active monitoring and prevention are important for the clinical

team to understand. This paper examines this subject in detail, considering the various ways of monitoring tooth wear and advising the dental team of appropriate methods and interventions.

Cocozza and colleagues highlight how the numerous clinical presentations of tooth wear can influence the complexity of the treatment required and provide the clinical team with a logical sequence of treatment options for the definitive management of patients affected by the condition.

Monitoring and providing treatment for a worn dentition will of course require clinical procedures. Cowan describes in detail the techniques required for creating high-quality clinical records for treatment planning, including articulated study casts.

The treatment of the worn dentition, influenced by numerous dental, **»**

« clinician, technical and patient factors, cannot be entirely described in a series of papers. However, this themed issue includes contributions from leading clinicians and educators, who provide their considerations of different treatment approaches.

Aminian and colleagues describe the indications for the use of direct composite restorations, and in a second paper, illustrate the clinical applications of this approach, with a number of treated clinical cases.

Hassall describes another method, the monolithic composite restoration. He also then explains the justification for using this and illustrates indirect, monolithic ceramic restorations for the management for tooth wear, when the clinical situation or patient expectations require this.

Hackett and colleagues explain how some of the more severe cases of tooth wear can effectively be managed by removable prosthodontics, which may be a relatively simple way of providing a good

outcome for patients significantly affected by the condition.

In our final paper, Yar takes readers beyond the clinical procedures that many are familiar and comfortable with, to describe the use of digital technologies in the diagnosis planning and delivery of

significantly influenced by the political and socio-economic environments and that access to care, affordability of treatment and the changing expectations of our patients can make managing tooth wear, for both individuals and populations, very challenging.

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treatment for the management of tooth wear.

These papers present a UK focus on tooth wear, but each author draws on high-quality international research and demonstrates their knowledge, skills and experiences from working in and alongside clinical teams in the UK and abroad. We recognise that patient care is

We are grateful to the many experienced and expert colleagues who have provided these papers for this themed issue. We do not underestimate the time and effort required to do so. We hope that we have delivered a breadth and depth of content to support clinical teams when managing these patients. ■

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