

# Oral splints for patients with temporomandibular disorders or bruxism: a systematic review and economic evaluation

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**Declared competing interests of authors:** none

Published February 2020

DOI: 10.3310/hta24070

## Plain English summary

Oral splints for temporomandibular disorders or bruxism

Health Technology Assessment 2020; Vol. 24: No. 7

DOI: 10.3310/hta24070

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## Plain English summary

**T**reatment options for people experiencing temporomandibular disorders (pain and/or restricted movement in and around the jaw joint) include splints, which are removable appliances, often similar to a mouthguard. They are provided to patients to help ease pain in the mouth, face or jaws. They are also used to manage the symptoms of temporomandibular disorders, such as frequent headaches/migraines, clicking jaws, restricted mouth-opening or tooth wear from the grinding of teeth (bruxism). There are many types of splints.

This research looked at the evidence addressing the primary question of whether or not splints work (regardless of type of splint) in reducing the pain associated with temporomandibular disorders and/or tooth wear, and if they offered value for money. Patients were involved in the research to ensure that the question and the outcomes that were measured were appropriate.

A systematic review of the literature was undertaken to find all randomised controlled trials including patients with temporomandibular disorders or bruxism. Online databases of research publications were searched, and these searches were checked, to identify relevant trials. All stages of the review process were undertaken to the highest standards by two people, independently and in duplicate, using well-respected and recognised Cochrane methods. We conducted a value-for-money assessment, comparing the trial data with the costs of splints to see if splints are a cost-effective use of NHS funding.

There was no evidence that splints reduced pain when compared with not wearing a splint or when compared with a minimal treatment (like jaw exercises, advice or education) in patients with temporomandibular disorders. The evidence was assessed as being of very low quality; therefore, it remains unclear whether or not splints are good value for money, or if they should be paid for by the NHS.

This research showed that more well-conducted trials on temporomandibular disorder patients are needed.

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 3.819

*Health Technology Assessment* is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the Clarivate Analytics Science Citation Index.

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## This report

The research reported in this issue of the journal was funded by the HTA programme as project number 16/146/06. The contractual start date was in September 2017. The draft report began editorial review in November 2018 and was accepted for publication in May 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

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