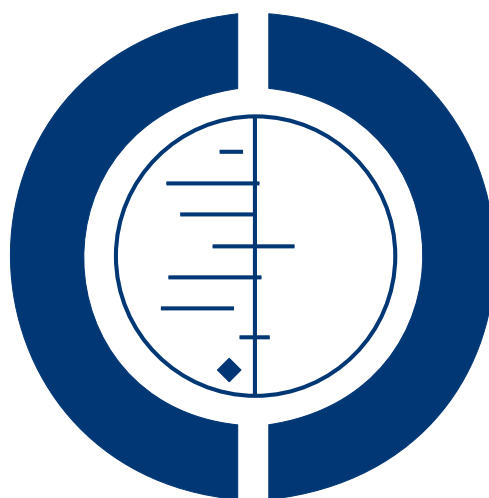


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[Intervention Review]

Interventions for the treatment of burning mouth syndrome

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Editorial group: Cochrane Oral Health Group.

Publication status and date: Edited (no change to conclusions), published in Issue 1, 2009.

Review content assessed as up-to-date: 14 November 2004.

Citation: Zakrzewska JM, Forssell H, Glenny AM. Interventions for the treatment of burning mouth syndrome. *Cochrane Database of Systematic Reviews* 2005, Issue 1. Art. No.: CD002779. DOI: 10.1002/14651858.CD002779.pub2.

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ABSTRACT

Background

The complaint of a burning sensation in the mouth can be said to be a symptom of other disease or a syndrome in its own right of unknown aetiology. In patients where no underlying dental or medical causes are identified and no oral signs are found, the term burning mouth syndrome (BMS) should be used. The prominent feature is the symptom of burning pain which can be localised just to the tongue and/or lips but can be more widespread and involve the whole of the oral cavity. Reported prevalence rates in general populations vary from 0.7% to 15%. Many of these patients show evidence of anxiety, depression and personality disorders.

Objectives

The objectives of this review are to determine the effectiveness and safety of any intervention versus placebo for relief of symptoms and improvement in quality of life and to assess the quality of the studies.

Search strategy

We searched the Cochrane Oral Health Group Trials Register (20 October 2004), CENTRAL (*The Cochrane Library* 2004, Issue 4), MEDLINE (January 1966 to October 2004), EMBASE (January 1980 to October). Clinical Evidence Issue No. 10 2004, conference proceedings and bibliographies of identified publications were searched to identify the relevant literature, irrespective of language of publication.

Selection criteria

Studies were selected if they met the following criteria: study design - randomised controlled trials (RCTs) and controlled clinical trials (CCTs) which compared a placebo against one or more treatments; participants - patients with burning mouth syndrome, that is, oral mucosal pain with no dental or medical cause for such symptoms; interventions - all treatments that were evaluated in placebo-controlled trials; primary outcome - relief of burning/discomfort.

Data collection and analysis

Articles were screened independently by two reviewers to confirm eligibility and extract data. The reviewers were not blinded to the identity of the studies. The quality of the included trials was assessed independently by two reviewers, with particular attention given to allocation concealment, blinding and the handling of withdrawals and drop outs. Due to both clinical and statistical heterogeneity statistical pooling of the data was inappropriate.

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Main results

Nine trials were included in the review. The interventions examined were antidepressants (two trials), cognitive behavioural therapy (one trial), analgesics (one trial), hormone replacement therapy (one trial), alpha-lipoic acid (three trials) and anticonvulsants (one trial). Diagnostic criteria were not always clearly reported. Out of the nine trials included in the review, only three interventions demonstrated a reduction in BMS symptoms: alpha-lipoic acid (three trials), the anticonvulsant clonazepam (one trial) and cognitive behavioural therapy (one trial). Only two of these studies reported using blind outcome assessment. Although none of the other treatments examined in the included studies demonstrated a significant reduction in BMS symptoms, this may be due to methodological flaws in the trial design, or small sample size, rather than a true lack of effect.

Authors' conclusions

Given the chronic nature of BMS, the need to identify an effective mode of treatment for sufferers is vital. However, there is little research evidence that provides clear guidance for those treating patients with BMS. Further trials, of high methodological quality, need to be undertaken in order to establish effective forms of treatment for patients suffering from BMS.

PLAIN LANGUAGE SUMMARY

Interventions for the treatment of burning mouth syndrome

There is insufficient evidence to show the effect of painkillers, hormones or antidepressants for 'burning mouth syndrome' but there is some evidence that learning to cope with the disorder, anticonvulsants and alpha-lipoic acid may help.

A burning sensation on the lips, tongue or within the mouth is called 'burning mouth syndrome' when the cause is unknown and it is not a symptom of another disease. Other symptoms include dryness and altered taste and it is common in people with anxiety, depression and personality disorders. Women after menopause are at highest risk of this syndrome. Painkillers, hormone therapies, antidepressants have all been tried as possible cures. This review did not find enough evidence to show their effects. Treatments designed to help people cope with the discomfort and the use of alpha-lipoic acid may be beneficial. More research is needed.