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[Intervention Review]

Interventions for treating post-extraction bleeding

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ABSTRACT

Background

Post-extraction bleeding (PEB) is a recognised, frequently encountered complication in dental practice, which is defined as bleeding that continues beyond 8 to 12 hours after dental extraction. The incidence of post-extraction bleeding varies from 0% to 26%. If post-extraction bleeding is not managed, complications can range from soft tissue haematomas to severe blood loss. Local causes of bleeding include soft tissue and bone bleeding. Systemic causes include platelet problems, coagulation disorders or excessive fibrinolysis, and inherited or acquired problems (medication induced). There is a wide array of techniques suggested for the treatment of post-extraction bleeding, which include interventions aimed at both local and systemic causes. This is an update of a review published in June 2016.

Objectives

To assess the effects of interventions for treating different types of post-extraction bleeding.

Search methods

Cochrane Oral Health's Information Specialist searched the following databases: Cochrane Oral Health's Trials Register (to 24 January 2018), the Cochrane Central Register of Controlled Trials (CENTRAL) (the Cochrane Library, 2017, Issue 12), MEDLINE Ovid (1946 to 24 January 2018), Embase Ovid (1 May 2015 to 24 January 2018) and CINAHL EBSCO (1937 to 24 January 2018). The US National Institutes of Health Trials Registry (ClinicalTrials.gov) and the World Health Organization International Clinical Trials Registry Platform were searched for ongoing trials. We searched the reference lists of relevant systematic reviews.

Selection criteria

We considered randomised controlled trials (RCTs) that evaluated any intervention for treating PEB, with male or female participants of any age, regardless of type of teeth (anterior or posterior, mandibular or maxillary). Trials could compare one type of intervention with another, with placebo, or with no treatment.



Data collection and analysis

Three pairs of review authors independently screened search records. We obtained full papers for potentially relevant trials. If data had been extracted, we would have followed the methods described in the *Cochrane Handbook for Systematic Reviews of Interventions* for the statistical analysis.

Main results

We did not find any randomised controlled trial suitable for inclusion in this review.

Authors' conclusions

We were unable to identify any reports of randomised controlled trials that evaluated the effects of different interventions for the treatment of post-extraction bleeding. In view of the lack of reliable evidence on this topic, clinicians must use their clinical experience to determine the most appropriate means of treating this condition, depending on patient-related factors. There is a need for well designed and appropriately conducted clinical trials on this topic, which conform to the CONSORT statement (www.consort-statement.org/).

PLAIN LANGUAGE SUMMARY

Interventions for managing bleeding after tooth removal

Review question

We conducted this review to assess different interventions for treating bleeding after tooth removal.

Background

After tooth extraction, it is normal for the area to bleed and then clot, generally within a few minutes. It is abnormal if bleeding continues without clot formation, or lasts beyond 8 to 12 hours; this is known as post-extraction bleeding (PEB). Such bleeding incidents can cause distress for patients, who might need emergency dental consultations and interventions. The causes of PEB can be local, a systemic disease, or a medication. To control this bleeding, many local and systemic methods have been practised, based on the clinician's expertise. To inform clinicians about the best treatment, evidence is needed from studies where people have been randomly allocated to one of at least two different groups, which receive different treatments, or no treatment (i.e. 'randomised controlled trials' or RCTs).

Study characteristics

Authors working with Cochrane Oral Health updated this review of RCTs that assess interventions to treat bleeding after tooth removal. The original review was published in June 2016. For this version, we searched the medical and dental literature to 24 January 2018. We found no RCTs that met the inclusion criteria for our review.

Key results and quality of the evidence

This review revealed that there is no RCT evidence for the effectiveness of any available intervention for treating post-extraction bleeding. High quality RCTs are needed to help clinicians and patients make informed choices about treatment options.