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Topical agents or dressings for pain in venous leg ulcers

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Abstract

Background

Venous leg ulcers affect up to 1% of people at some time in their lives and are often painful. The main treatments are compression bandages and dressings. Topical treatments to reduce pain during and between dressing changes are sometimes used.

Objectives

To determine the effects of topical agents or dressings for pain in venous leg ulcers.

Search methods

For this third update the following databases were searched: Cochrane Wounds Group Specialised Register (searched 9 May 2012); The Cochrane Central Register of Controlled Trials (CENTRAL) (*The Cochrane Library* 2012, Issue 4); Ovid MEDLINE (2009 to April Week 4

2012); Ovid MEDLINE (In-Process & Other Non-Indexed Citations May 08, 2012); Ovid EMBASE (2009 to 2012 Week 18); and EBSCO CINAHL (2009 to May 2 2012). No date or language restrictions were applied.

Selection criteria

Published or unpublished randomised controlled trials (RCTs) that evaluated the effects of topical agents or dressing for the treatment of pain in venous ulcers were included.

Data collection and analysis

Two review authors independently performed trial selection, data extraction and risk of bias assessment.

Main results

Six trials (343 participants) evaluated Eutectic Mixture of Local Anaesthetics (EMLA): lidocaine-prilocaine cream for the pain associated with ulcer debridement. The between-group difference in pain measured on a 100 mm scale was statistically significant in favour of EMLA (MD -20.65, 95% CI -12.19 to -29.11). No significant between-group differences in burning or itching were observed.

Two trials (470 participants with venous leg ulcers) evaluated ibuprofen slow-release foam dressings for persistent venous leg ulcer pain. Compared with local best practice, significantly more participants in the ibuprofen dressing group achieved the outcome of >50% of the total maximum pain relief score between day 1 and day 5 than participants in the local best practice group (RR 1.63, 95% CI 1.24 to 2.15). The number needed to treat was 6 (95% CI 4 to 12). In the second trial, compared with an identical non-ibuprofen foam dressing, there was no statistically significant difference in the proportion of participants experiencing slight to complete pain relief on the first evening of treatment. Limited data were available to assess healing rates or adverse events.

Authors' conclusions

There is some evidence to suggest that ibuprofen dressings may offer pain relief to people with painful venous leg ulcers. EMLA (5%) appears to provide effective pain relief during the debridement of venous leg ulcers. Further research should consider standardised pain assessment methods and assess both the effect on ulcer healing and the impact of long term use of these treatments.

Plain language summary

English

Topical agents or dressings for reducing pain in venous leg ulcers

Venous leg ulcers are often painful, both during and between dressing changes, and during surgical removal of dead tissue (debridement). Dressings, topical creams and lotions have been promoted to reduce the pain of ulcers. Two trials tested a dressing containing ibuprofen, however, the pain measures and time frames reported were

different. One trial indicated that pain relief achieved over 5 days with ibuprofen dressings could represent a clinically relevant reduction in pain. The other trial found no significant difference in the chance of pain relief, measured on the first night of treatment, for ibuprofen dressings compared with foam dressings. This trial, however, was small and participants were only followed for a few weeks, which may not be long enough to assess whether the dressing affects healing. There was evidence from five trials that a local anaesthetic cream (EMLA 5%) reduces the post-procedural pain of debriding leg ulcers but there was insufficient evidence regarding any side effects of this cream and its impact on healing.

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