

Dressings for healing venous leg ulcers.

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Author information

Abstract

BACKGROUND:

Venous leg ulcers, sometimes called varicose or stasis ulcers, are a consequence of damage to the valves in the veins of the legs, leading to raised venous pressure. Venous ulcers are characterised by a cyclical pattern of healing and recurrence. The main treatment is the application of compression, either in the form of compression bandages or hosiery. Dressings are usually applied beneath the compression to aid healing, comfort and to control exudate. Wounds heal quicker in a moist environment and dressings are used to absorb excess fluid or retain fluid in an otherwise dry wound in order to achieve a 'moist wound environment'. There are a large number of dressing products and types available. It is unclear whether particular dressings aid healing of leg ulcers.

OBJECTIVES:

To assess the effectiveness of wound dressings for the treatment of venous leg ulcers.

SEARCH STRATEGY:

We searched the Cochrane Wounds Group Specialised Register (April 2006) and CENTRAL (issue 1, 2006) and several other electronic databases (up to April 2005). Manufacturers of dressing products were contacted for unpublished studies.

SELECTION CRITERIA:

Randomised controlled trials that evaluated dressings for the treatment of venous leg ulcers. There was no restriction in terms of source, date of publication or language. Ulcer healing was the primary endpoint.

DATA COLLECTION AND ANALYSIS:

Data from eligible studies were extracted and summarised using a data extraction sheet by two authors independently.

MAIN RESULTS:

42 randomised controlled studies were identified that met the inclusion criteria. The main dressing types that were evaluated were hydrocolloids (n = 23), foams (n = 6), alginates (n = 4), hydrogel dressings (n = 6) and a group of miscellaneous dressings (n = 3). In none of the comparisons was there evidence that any one dressing type was better than others in terms of number of ulcers healed. Current evidence does not suggest that hydrocolloids are more effective than simple low adherent dressings used beneath compression (9 trials; relative risk for healing with hydrocolloid 1.09 (95% CI 0.89 to 1.34)). For other comparisons there was insufficient evidence.

AUTHORS' CONCLUSIONS:

The type of dressing applied beneath compression has not been shown to affect ulcer healing. For the majority of dressing types there was insufficient data to allow us to draw strong conclusions except for hydrocolloid compared with a low adherent dressing. The result of the meta-analysis indicate no significant difference in healing rates between hydrocolloid dressings and simple, low-adherent dressings when used beneath compression. Decisions regarding which dressing to apply should be based on local costs of dressings and practitioner or patient preferences.

Comment in

- [Review: insufficient evidence exists for any one dressing type \(used beneath compression\) for venous leg ulcer healing.](#) [Evid Based Nurs. 2007]