Nursing Practice

Cochrane summary

Leg ulcers

A Cochrane review found no evidence that oral zinc speeds up the rate of leg ulcer healing, but research on this topic is limited.

Oral zinc for arterial and venous leg ulcers

Cochrane review question: Is oral zinc effective in increasing the rate of healing of arterial or venous leg ulcers?

Nursing implications

Leg ulcers occur in approximately 1% of the population and can become chronic in nature with a high risk of recurrence. They normally form on the inner leg, just above the ankle, a spot of poor circulation.

Nurses play a large role in the treatment and ongoing management of leg ulcers. A number of methods are used to assist in the healing of leg ulcers. These are primarily wound dressings, used in addition to the treatment of underlying medical conditions such as poor blood supply.

The use of oral zinc has been suggested as one approach and a systematic review was undertaken to determine its effectiveness.

Study characteristics

This summary is based on the results of a Cochrane systematic review containing six randomised controlled trials (RCTs) involving 183 participants. No new studies were located in the latest update of this review. All of the included studies were small; the median sample size was 33, with a range of 10-42 people).

Participants were people of any age with an arterial or venous leg ulcer of at least four weeks’ duration. The intervention of interest was the use of oral zinc sulphate; no other information was provided about the intervention. Interventions were compared with no treatment or placebo.

The primary outcome of interest was complete healing of the ulcer (number of ulcers healed at the end of the trial, time to healing of ulcer or rate of healing).

The included studies were generally of low methodological quality, and patient numbers were individually low. Meta-analysis was undertaken where possible.

Summary of key evidence

The majority of trials looked at participants with venous ulcers (n=4); one trial examined people with arterial ulcers and the remaining trial was mixed. Five studies compared oral zinc sulphate with a placebo; the remaining compared the intervention with no treatment. The duration of treatment ranged from four weeks to 12 months.

Meta-analysis indicated that there was no statistically significant benefit in healing in the intervention group compared with controls.

Best practice recommendations

There currently is no evidence that the use of oral zinc speeds the healing of venous or arterial leg ulcers, although the available evidence is limited and of poor quality. Further research is required that includes larger numbers of participants and more robust methods in design.

The full review report, including references, can be accessed at tinyurl.com/ulcer-zinc

William H Anger Jr is a member of the Cochrane Nursing Care Field (CNCF) at Beck Health Sciences Library, the Miriam Hospital, A Lifespan Partner, Providence, RI, US

Reference


Unlimited access to learning units

Nursing Times subscribers can now enjoy unlimited FREE access to learning units, each worth £10+VAT! Enhance your practice and increase your knowledge today.

- Convenient and enjoyable – study wherever and whenever is convenient for you
- Over 30 units to choose from and new ones added monthly
- Each provides at least 2 hours’ CPD to count towards your PREP requirement
- Units focused on case-based scenarios to help you transfer theory into clinical practice
- Optional extra written activities enable you to continue your learning offline

How to access your learning units:

Already an NT subscriber?
Access your UNLIMITED FREE units now. Visit nursings.net/learning (Activate your online subscription first at nursings.net/activate-now)

Not an NT subscriber?
Subscribe now for £20.85* per quarter and get UNLIMITED access to learning units. Visit: subscription.co.uk/nuretimes/nvcw

The Cochrane Nursing Care Field writes exclusively for Nursing Times readers.