

# Venous leg ulcers: pentoxifylline (Trental®) or zinc

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Although less of a problem now through excellent nursing care, venous leg ulcers are sometimes still problematic. The following are conclusions from relatively recent Cochrane reviews on the value of zinc supplementation and the potential use of pentoxifylline.

## Oral zinc for venous leg ulcers

Wilkinson EA, Hawke CI. Cochrane Database Syst Rev. 2000;(2):CD001273.

**BACKGROUND:** Leg ulcers affect up to 1% of people at some time in their life. Management includes care of the ulcer using dressings and treatment of underlying medical problems such as malnutrition, lack of minerals, vitamins, poor blood supply or infection.

**OBJECTIVES:** To assess the effectiveness of oral zinc in healing arterial or venous leg ulcers.

**MAIN RESULTS:** There were six eligible trials. All were small and serum zinc was measured at baseline or during the trial in four trials. Overall there was no evidence of a beneficial effect of treatment with zinc sulphate on the number of ulcers healed at the end of the trials. There was some evidence that oral zinc might have had a beneficial effect on healing of venous ulcers in people with a 'low' serum zinc level at baseline.

**AUTHORS' CONCLUSIONS:** Overall, oral zinc sulphate did not appear to aid healing of leg ulcers, although it might be beneficial in those with venous leg ulcers and low serum zinc. Further research is needed to ascertain the serum zinc concentration below which treatment with zinc might be beneficial, and the dose required.

## Pentoxifylline for venous leg ulcers

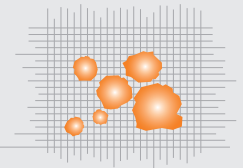
Jull A, Arroll B, Parag V, Waters J. Cochrane Database Syst Rev. 2007 Jul 18;(3):CD001733.

**BACKGROUND:** Healing of venous leg ulcers is improved by the use of compression bandaging but some venous ulcers remain unhealed, and some people are unsuitable for compression therapy. Pentoxifylline, a drug which helps blood flow, has been used to treat venous leg ulcers. An earlier version of this review included nine randomised controlled trials, but more research has been since been conducted and an updated review is required.

**OBJECTIVES:** To assess the effects of pentoxifylline (oxpentifylline or Trental® 400) for treating venous leg ulcers, compared with placebo, or other therapies, in the presence or absence of compression therapy.

**MAIN RESULTS:** Twelve trials involving 864 participants were included. The quality of trials was variable. Combining 11 trials that compared pentoxifylline with placebo or no treatment (with or without compression) demonstrated that pentoxifylline is more effective than placebo in terms of complete ulcer healing or significant improvement (RR 1.70, 95% CI 1.30 to 2.24). Pentoxifylline plus compression is more effective than placebo plus compression (RR 1.56, 95% CI 1.14 to 2.13). Pentoxifylline in the absence of compression appears to be more effective than placebo or no treatment (RR 2.25, 95% CI 1.49 to 3.39). More adverse effects were reported in people receiving pentoxifylline (RR 1.56, 95% CI 1.10 to 2.22).

**AUTHORS' CONCLUSIONS:** Pentoxifylline is an effective adjunct to compression bandaging for treating venous ulcers and may be effective in the absence of compression. The majority of adverse effects were gastrointestinal disturbances.



## KEY POINTS

**Oral zinc sulphate** did not appear to aid healing of leg ulcers, although it might be beneficial in those with venous leg ulcers and low serum zinc.

**Pentoxifylline** is an effective adjunct to compression bandaging for treating venous ulcers and may be effective in the absence of compression.

**NUGGETS of KNOWLEDGE** provides succinct summaries of pharmaceutical evidence about treatment of common conditions presenting in primary care and possible adverse drug reactions.

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