



Chinese herbal medicine for diabetic foot ulcers : a systematic review on randomized controlled trials

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Background

Diabetic foot ulceration is one of the common complications of diabetic patients. Chinese herbs have been used for treating diabetic foot and clinical trials have been published.

Objectives

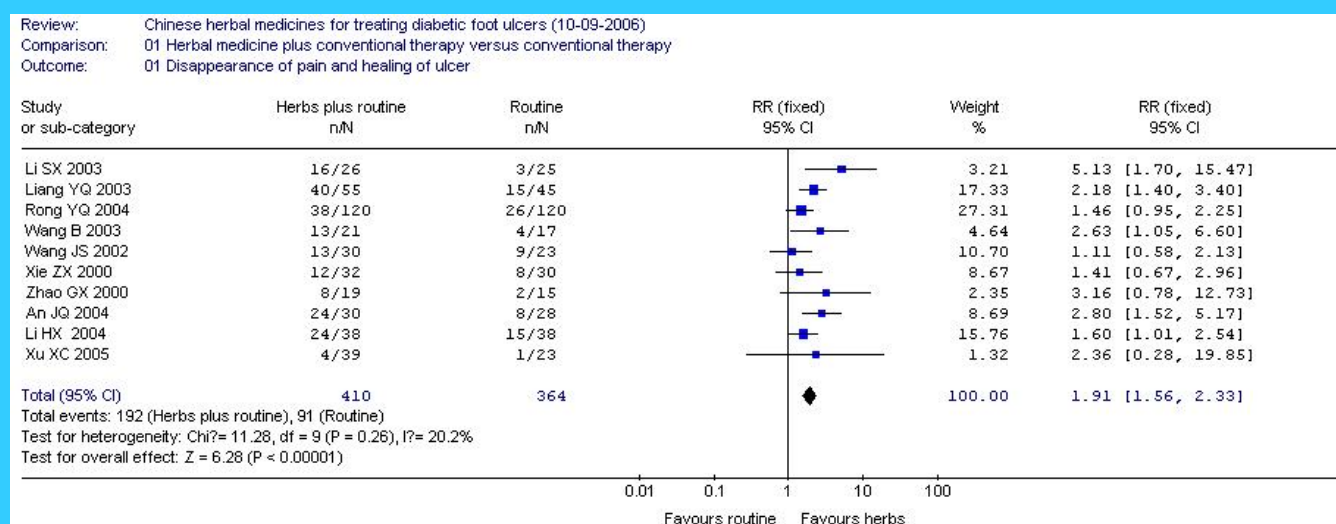
To assess the efficacy and safety of Chinese herbs in patients with diabetic foot.

Methods

The protocol of this systematic review was published in the Cochrane Library in 2006¹. We searched the Cochrane Wounds Group Specialized Register, MEDLINE(1966 to 04/2006), EMBASE(1974 to 4/2006), Chinese Biomedical Database (1979 to 4/2006), CNKI(1994 to 5/2006), and VIP (1989 to 5/2006) to identify randomized clinical trials (RCTs) regardless of language and publication status. We also hand searched 10 Chinese journals. The inclusion criteria were RCTs or quasi-RCTs testing Chinese herbal medicine in patients with diabetic foot ulcer. Primary outcome included clinical symptoms (heal of ulcers, numbness and pain). Two authors extracted data independently, and assessed the quality using Jadad scale plus allocation concealment.

Results

We identified 30 RCTs and 1 quasi-RCT were included involving 2061 patients in total. They were all published in Chinese and the quality of the trials is low (Jadad Scale 1 score). No trial used blinding or placebo. Meta-analyses showed that supplementing *qi* and nourishing *yin* (SQNY) herbs and heat-clearing and detoxifying (HCD) herbs improved ulcer healing over 80%, and disappearance of numbness and pain compared with conventional therapy (RR of SQNY 0.62 [95%CI 0.47-0.81] from 3 trials, and RR of HCD 0.57 [0.37-0.88] from 3 trials), respectively. For outcome of reducing amputation rate, herbs of SQNY, HCD, and promoting tissue regeneration were better than conventional therapy, and the RR was 0.27 [0.16-0.46], 0.33 [0.18-0.62], and 0.27 [0.19-0.40], respectively. When herbal medicines were applied with conventional therapy, additional benefit of pain relief and ulcer healing was achieved (Fig.). The reported adverse effects were skin itching, blood stasis in skin, vomiting and dry mouth.



Conclusions

The current evidence from small and low quality trials is promising, but not sufficient to recommend the herbal therapy for treatment of diabetic foot ulcer. Large, rigorously designed trials are warranted.

References

- 1 JP Liu, J Zhang, H Lu, SEM Bell-Syer. Chinese herbal medicines for treating diabetic foot ulcers. *Cochrane Database of Systematic Reviews* 2006, Issue 3. Art. No.: CD006098. DOI: 10.1002/14651858.CD006098.