A Systematic Review of *Si-Miao-Yong-An* Decoction for the Treatment of Diabetic Foot

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Abstract

Introduction: Diabetic foot (DF) is a common complication in patients with diabetes mellitus. Due to arterial abnormalities and diabetic neuropathy, as well as a tendency to delayed wound healing, infection or gangrene of the foot is relatively common. Early study indicated Si-Miao-Yong-An (SMYA) decoction is the most chosen Chinese herbal formulae in the treatment of DF. The aim of this study is to assess the quality of current evidence, and systematic review the effectiveness and safety of SMYA decoction for the treatment of DF.

Method: (1) Search strategy: a special protocol was designed, and electronic databases and hand-search materials were used for screening eligible trials. (2) Inclusive criteria: randomized controlled trials (RCTs) to examine the efficacy and/or safety of SMYA decoction in DF treatments were valid. (3)Data analysis: the Jadad's scale was used to assess the quality of eligible trials.

Result: Total 23 RCTs met the inclusion criteria. Among those, 1341 patients are involved, 702 patients were treated by SYMA decoction. 22 trails using SMYA decoction combined WM claimed that they showed a statistically significant advantages over the treatments using WM alone in reducing DF symptoms. Only 1 RCT reported adverse events related to SMYA decoction, but less than WM treatment.

Conclusion: All available evidence points to the fact that SMYA decoction may benefit to those diabetes patients with foot problem. However, due to the poor quality of included trials, more high-quality trials are required to substantiate or refute these early findings.
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Conclusion: All available evidence points to the fact that SMYA decoction may benefit to those diabetes patients with foot problem. However, due to the poor quality of included trials, more high-quality trials are required to substantiate or refute these early findings.
Keywords: SMYA decoction; herbal medicine; diabetic foot; systematic review
中文摘要

背景：糖尿病足是 2 型糖尿病最常見的併發症。由於高血糖造成下肢血管系統和下肢神經系統病變，下肢的免疫系統和創面恢復能力明顯減弱，創傷後的感染與糖尿病足壞疽密切相關。早期研究證實，四妙勇安湯是臨床治療糖尿病足應用最多的中醫方劑。四妙勇安湯作爲治療脫疽的傳統處方，在糖尿病足的臨床治療中被廣泛地應用。本研究的目的在於系統地評估四妙勇安湯治療糖尿病足的有效性和安全性。

方法：(1) 文獻檢索：檢索範圍包括所有語種。通過電子文獻資料庫、人工檢索等方法收集相關的臨床文獻。(2) 篩選標準：選擇所有四妙勇安湯治療糖尿病的隨機對照實驗（RCTs）。(3) 資料分析：對符合納入標準的研究採用 Jadad 計分定量評估其品質。資料收集及分析由兩名人員獨立完成。

結果：經過篩選，總共有 23 項 RCT 研究符合標準被納入。共有 1341 名受試者參與這些研究，其中 702 名受試者接受了四妙勇安湯治療。22 項研究報告應用四妙勇安湯合併西藥治療相比單純西藥治療有明顯優勢，結果具有統計學意義。1 項研究報告了四妙勇安湯有關的不良反應，但其少于西药组。

結論：所有目前的證據，提示了四妙勇安湯在糖尿病足的臨床治療中具有療效的可能性。但是由於證據品質較低，需要更多高質量的研究來支持或反對早期的研究發現。

關鍵字：四妙勇安湯；糖尿病足；系統評價
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