TITLE: Total Contact Casts for Diabetic Foot Ulcers: Cost-Effectiveness

DATE: 24 June 2013

RESEARCH QUESTION

What is the evidence for the cost-effectiveness of total contact casts or instant total contact casts for the treatment of diabetic foot ulcers in adults?

KEY MESSAGE

Two randomized controlled trials, one non-randomized study, and one economic evaluation were identified regarding the cost-effectiveness of total contact casts or instant total contact casts for the treatment of diabetic foot ulcers in adults.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, Issue 5), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2003 and June 10, 2013. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by economic evaluations.

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Two randomized controlled trials (RCTs), one non-randomized study, and one economic evaluation regarding the cost-effectiveness of total contact casts or instant total contact casts for the treatment of diabetic foot ulcers in adults were identified. No health technology assessments, systematic reviews, or meta-analyses were identified regarding the cost-effectiveness of total contact casts for this indication. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Two RCTs\(^1,2\) compared total contact casts (TCC) with instant total contact casts (iTCC). No significant difference was found in the two types of casts for healing rates, healing time, or adverse events. The iTCC was found to be significantly less expensive than TCC in one trial\(^1\) and associated with overall lower cost in the second trial.\(^2\)

One non-randomized study\(^3\) compared a modified sandal, a modified plaster of Paris cast, and a Scotchcast boot. There was no significant difference amongst the three devices for median healing time or cumulative wound survival at 12 weeks. The modified sandal was the more cost-effective treatment.

One economic evaluation\(^4\) explored a model for the offloading of diabetic foot ulcers. For the patients who had received treatment with TCC (6% of all patients in the registry), the average total cost of treatment was half the cost of those patients who did not receive TCC.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials


Non-Randomized Studies


Economic Evaluations


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APPENDIX – FURTHER INFORMATION:

Systematic Reviews – Cost-effectiveness not addressed


Review Articles


Additional References
