Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

CRD summary
This study examined the costs and patient outcomes of two wound dressing systems (Tegaderm Absorbent, and Mepitel and Mepilex Border) for elderly patients with skin tears and fragile skin. The authors concluded that the healing rates and costs for both dressings were similar, and Tegaderm dressings were cost-effective if larger dressings were required. The evidence was extremely limited and the authors’ conclusions were not supported by the evidence presented.

Type of economic evaluation
Cost-effectiveness analysis

Study objective
The aim was to examine the costs and effectiveness of two wound dressing regimens for the management of skin tears in elderly patients with fragile skin.

Interventions
The two options for wound dressings were Tegaderm Absorbent and a combination of Mepitel and Mepilex Border. The Tegaderm dressing was a new absorbent acrylic polymer dressing and the alternative was the standard practice, silicone, adhesive contact layers or dressings.

Location/setting
UK/secondary care.

Methods
Analytical approach:
The cost-effectiveness analysis was based on a prospective randomised open-label pilot study. The authors did not state the study perspective. The analytic time frame was four weeks, matching the trial period.

Effectiveness data:
The clinical outcomes were the performance of the dressings measured by healed or partly healed skin tears. The study was a pilot open trial, which recruited 60 participants from patients routinely seen by physicians at three clinics, in England or Scotland. Twenty-six patients from two clinics consented; two died, two were discharged and one discontinued treatment, leaving 21 patients who completed the study (10 in the Tegaderm group and 11 in the Mepitel-Mepilex group). The patients had a mean age of 83 years, with partial- or full-thickness tears (Payne Martin grade II or III) to their upper or lower limbs.

Monetary benefit and utility valuations:
Not relevant.

Measure of benefit:
The measure of benefit was the number of healed or partly healed skin tears.

Cost data:
Wound dressings, for a maximum of seven days, were the only costs included in the analysis. The unit costs were from the British National Formulary and varied by the size of the dressing used (in centimetres). The costs were reported in UK £.
Analysis of uncertainty:
None reported.

Results
At four weeks, there were eight healed and one partly healed skin tears in the Tegaderm group, compared with six healed and five partly healed skin tears in the Mepitel-Mepilex group.

The mean costs, for seven days of treatment, were £7.47 in the Tegaderm group and £8.18 in the Mepitel-Mepilex group.

Authors' conclusions
The authors concluded that both dressings were effective and the cost difference was negligible. If a larger dressing was needed, Tegaderm dressings were cost-effective and, overall, they could be viewed as a cost-effective alternative to traditional dressings.

CRD commentary
Interventions:
The dressings were briefly reported, but their mechanisms of action were not described and the manufacturers' information documents should be consulted. The patients recruited to the pilot study might be similar to and representative of those of other settings.

Effectiveness/benefits:
The evidence of clinical effectiveness for the two options was weak. The study was a pilot open trial and the investigators had difficulty recruiting patients. No statistical analysis of the clinical outcomes was applied because the sample size was insufficient to provide meaningful data. The measurement of the clinical endpoints of healed and partly healed was not described and is likely to have been subjective. An open-label trial could be subject to other unknown biases.

Costs:
The costs were for a maximum seven-day wear time, but the manufacturers of Mepitel-Mepilex suggested that a 14-day wear time was possible. They did not include the remaining dressing costs for patients whose skin tears were not healed after seven days up to the four-week study period and the costs were, therefore, censored. The items included in the cost analysis were limited; nursing care and other health resources for wound care were omitted. The price year was not stated and no sensitivity analyses were undertaken.

Analysis and results:
The health outcomes and costs were not combined into incremental cost-effectiveness ratios. Sensitivity analyses were not undertaken and no measure of uncertainty around the results was presented. The cost analysis was secondary to the clinical outcomes of this small open-label pilot trial.

Concluding remarks:
The methods and results were minimally reported and were not comprehensive as the study was a small open-label pilot trial. The conclusions made by the authors are not supported by the data presented.

Funding
Not stated.

Bibliographic details

Original Paper URL
Indexing Status
Subject indexing assigned by CRD

MeSH
Wound Healing; Wounds and Injuries; Humans; Bandages; Cost-Benefit Analysis

Accession Number
22011001397

Date bibliographic record published
25/10/2012

Date abstract record published
16/11/2012