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# Specific guidelines on wound and wound-bed management 2011†

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## The principles of care of a chronic diabetic foot ulcer

The principles of care of a chronic diabetic foot ulcer are as follows:

(a) treatment of any associated infection,
(b) revascularization if appropriate and feasible,
(c) offloading to minimize trauma to the ulcer site and
(d) management of the wound and wound bed to promote healing.

## The most important principles of wound and wound-bed management are the most simple

- Regular inspection,
- cleansing,
- removal of surface debris and
- protection of the regenerating tissue from the environment.

The International Working Group on the Diabetic Foot has now conducted two systematic reviews of the evidence of effectiveness of interventions to enhance the healing of chronic ulcers of the foot in diabetes. The first reviewed publications up to 2006 and the second from 2006–2010. Each review searched for published controlled trials or cohort studies in which the response to the intervention being tested was compared with a control group. The following guidelines are based on the evidence derived from them.

## Wound and wound-bed management of diabetic foot ulcers can be addressed with a set of simple interventions

- The wound should be cleaned regularly with water or saline.
- Exudate should be controlled to maintain a moist wound environment; usually, a sterile, inert protective dressing is sufficient.
- In addition to regular debridement with a scalpel, other agents may be used to attempt to clean the wound bed.

In addition, the following conclusions were drawn.

- Topical negative pressure therapy may hasten healing of post-operative wounds, but the effectiveness and cost-effectiveness of the approach remain to be established.
- New studies provide further evidence that the use of systemic hyperbaric oxygen therapy may increase the incidence of healing and improve the long term outcome- even though further blinded studies are required to confirm its cost-effectiveness and as well as identify the population most likely to benefit.
- Various early studies of the effectiveness of the supernatant of platelet suspensions have suggested benefit, but there are no recent data.
- There are a limited number of reports suggesting that bioengineered skin products might hasten wound healing, but the evidence to justify their routine use is not strong.
- The effectiveness of topical platelet-derived growth factor (becaplermin) remains to be confirmed. Evidence of any effect on healing of other growth factors is preliminary. There are currently no data to justify the use of any other treatments or dressing products (including silver-containing dressings or other antiseptic products) in routine management of diabetic foot ulcers.

## Conflict of interest

None declared.



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