INAHTA Briefs

Issue 2007/105

Title **Negative Pressure Wound Therapy: A Rapid Assessment**

Agency **KCE, Belgian Health Care Knowledge Centre**
Wetstraat 62, BE-1040 Brussels, Belgium;
Tel: +32 2 287 3388, Fax: +32 2 287 3385; hta@kenniscentrum.fgov.be, www.kenniscentrum.fgov.be

Reference Report no 61, 2007.
http://kce.fgov.be/index_en.aspx?ID=0&SGREF=9152&CREF=9622

Aim

To synthesize the evidence on the clinical effectiveness, safety, and cost effectiveness of negative pressure wound therapy (NPWT).

Conclusions and results

Thirteen randomized controlled trials (RCTs) were identified, 11 of poor and 2 of moderate quality. Based on the current evidence, the efficacy of NPWT is unproven. Hence, this promising, emerging technology cannot be considered routine practice for treating chronic or acute wounds. Some evidence on the efficacy of NPWT exists only for diabetic foot ulcers and skin grafts. However, restricting NPWT to selected patients seems impossible at present because the evidence cannot clearly define the patients who would benefit most from the technology.

Although NPWT seems to be a safe technology, safety data are scarce. Well-conducted cost-effectiveness analyses are lacking. Hence, no conclusions can be drawn on the cost effectiveness of this technology, which relates in part to the uncertain clinical efficacy of the technology.

Recommendations

Although no strong arguments prohibit this type of treatment (because of believed potential cost saving and because the technology is apparently safe), hospitals should be well informed about the lack of evidence on the clinical efficacy, safety, and cost effectiveness of NPWT and about the manufacturers' profit margin (probably leaving room for further price negotiation).

Well-designed RCTs, conducted for well-defined wound types (eg, diabetic ulcers, pressure ulcers, traumatic wounds, or venous ulcers) are clearly needed as part of the research and development process of an emerging technology.

Methods

The results of this report are based on a systematic review of the literature, first searching for health technology assessments (HTA) and systematic reviews, and subsequently for RCTs not included in the retrieved HTAs and systematic reviews. Cost data were obtained from experts and contacts with the industry.

Written by Vlayen J, KCE, Belgium

ISSN 1654-501X