



TOPICAL NEGATIVE PRESSURE: A SYSTEMATIC REVIEW OF THE AVAILABLE EVIDENCE

Maureen Benbow, Sylvie Hampton, Pauline Beldon, Heather Newton
University Of Chester, Chester, United Kingdom

Aim: – to conduct a systematic review of international, English-language publications on topical negative pressure (TNP) to the end of December 2004.

Method: – an extensive literature review was conducted by a project group of tissue viability experts who systematically reviewed 89 worldwide (in English) research papers on TNP. The search strategy used the search terms and phrases vacuum-assisted therapy, VAC, topical negative pressure, TPN, wound suction and drainage and sub atmospheric pressure and covered all medical databases, an Internet search and hand search of the 'grey literature'. It was ascertained that no other reviews of TNP were being undertaken at that time. The 89 articles included research studies, review papers, consensus documents and therapy descriptions. The articles were filtered by type of article and each group of articles reviewed by members of the project team with experience in critically appraising research studies. A critical review form comprising 20 questions, grouped according to focus, was designed and used to conduct the review.

The results were recorded on an Excel worksheet and presented graphically, supported by commentary. The review addressed clinical, operational, communication, support and safety/liability/governance issues, which were agreed by the systematic review group as appropriate to elicit whether an evidence based, logical, clinical rationale was demonstrated in the reviewed articles.

Results: – the trends in support for those using the equipment, clinical evidence in the papers, communication between users and researchers and safety issues were identified.

Discussion: – the articles were noticeably lacking in information regarding the five key areas investigated making it difficult for clinicians to initiate effective service provision.