

Letter To Editor**Tropical pressure wound therapy**

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Healing a wound, a break in skin which is usually caused by cuts or scraps, is a response of the injury that sets into motion a sequence of events.¹⁻³ Various types of treatment methods have been used to increase the speed of this process. One of the new methods used recently to improve the speed of wound healing is Tropical Negative Pressure Wound Therapy (TNPWT). Although pressure decreases the speed of wound healing in some patients such as spinal cord injury individuals, and those who need to be in bed for a long time,^{4,5} it can also be used to facilitate the wound healing process, especially in chronic wounds.^{2,6-9} This method is based on the idea of turning the open wound into a close one and remove the excess fluid from the wound (Figure 1). The new method has been used as a non-pharmacological treatment for chronic and acute wounds such as pressure ulcers, diabetic, abdominal and traumatic wounds.²

Although, there are over 325 publications on TNPWT including 15 randomized clinical trials, it can not be concluded strongly that the new method results in a faster wound healing than other conventional methods. It has been defined that the new method enhances bacterial clearance and improves granulation tissue formation. There is some evidence regarding the positive effects of using TNPWT on wound healing which include provision of moist wound healing environment, removal of fluid

and infection materials, decreasing bacterial colonization, and increasing blood flow.^{2,6,7,10-12}

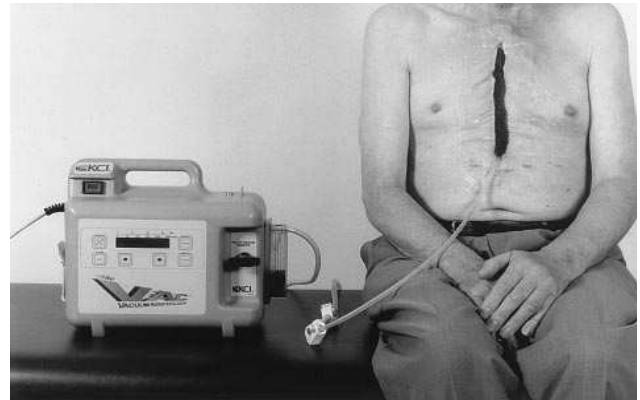


Figure 1. The NPWT system used for improving wound healing (adapted from Maryam et al.⁷ with permission).

Although many controlled and uncontrolled randomized studies described the effectiveness of this new method, a few prospective randomized control trials have been published. The research in this field had lots of problems such as small sample size, variable outcome measures across the studies and significant methodological problems. Therefore, it is difficult to have a strong conclusion regarding the influence of this method on wound healing. In conclusion, there is a need for a large high quality randomized study which focuses on some parameters like the quality of life, patient pain and cost of care.

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Conflict of Interests

Author has no conflict of interests.

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