Background and Importance

Negative pressure wound therapy (NPWT) consists in the use of a system that applies negative pressure to the surface of a wound, accelerating the wound healing process.\(^1\)

The mechanism of action is complex including the reduction in substances that inhibit healing, decrease in edema, elimination of exudate, stimulation of granulation tissue formation, physical stimulation of mitosis and wound contraction.\(^1\)

This therapy is indicated in various types of wounds such as: open abdomen, diabetic foot ulcers, pressure ulcers, after debridement or even as a prophylactic way to prevent surgical site infection.\(^1,2\)

The reduction in healing time with fewer dressing changes compared to conventional therapy is the great advantage of this therapy.\(^1\) The main disadvantage is associated cost, which mandates for rational use. In our hospital this is assured by handing on to the doctor responsible for the team of wounds the decision whether or not to apply the NPWT. Also, the technical opinion of the pharmacist of the team is essential to the achieve the approval from the executive board. The application of the NPWT requires the work from the multidisciplinary team of wound prevention and management which includes nurses with specific training, essential for best practice.

Aim and Objectives

To evaluate the use of NPWT in our hospital

Material and Methods

Analysis of the medical justification formularies submitted to the executive board to use of NPWT between January 2021 and August 2022.

Results

Between January 2021 and August 2022, we had 47 patients under treatment with NPWT, both inpatients and outpatients. The main indication was surgical dehiscence and postoperative care (48.9%). Treatment of pressure ulcers comes as second (23.4%) followed by treatment of diabetic foot ulcers and complications (19.1%). Duration of treatment varies from 3 to 6 weeks in most patients but can be extended as far as 28 or even 48 weeks.

Conclusion and Revelance

NPWT has increasingly been an option for the treatment of complex wounds in which treatment would take longer or even be less effective with conventional therapies. It is essential to maintain the assessment of the profile of patients who undergo this therapy in order to ensure the best use of it. The multidisciplinary team of wound prevention and management delivers better results.

References

1. Negative pressure wound therapy, UptoDate, accessed on 28 de Agosto de 2022.