

NPWT SIMPLIFIED WITH PICO

12 APRIL 2021

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LUNCHTIME 13:00 - 13:45

Simplifying negative pressure wound therapy with PICO

Presenters



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Learning objectives

 Understand the mode of action of negative pressure wound therapy (NPWT) and single-use negative pressure wound therapy (sNPWT)

- Identify some of the indications, contraindications and precautions for NPWT
- Describe some of the basic dressing application techniques for PICO sNPWT





Case study one

- 54-year-old male with seven-month history of static partial circumference lower leg venous ulceration
- Treated with non-adherent dressing under full compression
- Superficial slough present with poor quality granulation tissue present
- Varicose eczema and wound edges macerated





Changed healing trajectory in just two weeks¹

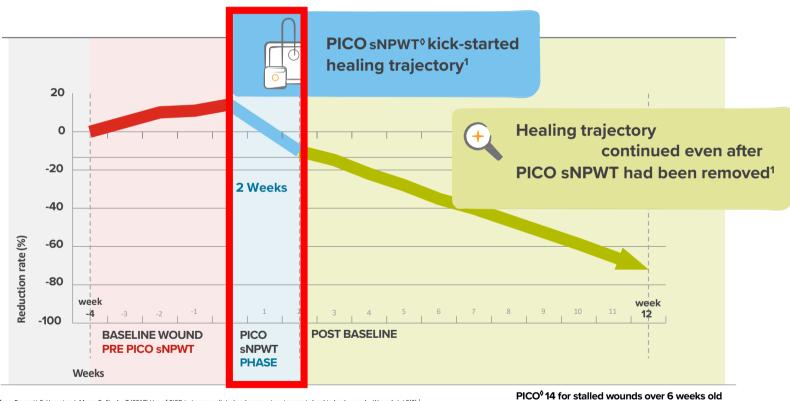


Image adapted from Dowsett C, Hampton J, Myers D, Styche T (2017) Use of PICO to improve clinical and economic outcomes in hard to heal wounds. Wounds Int 8(2) 1



Case study one

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tNPWT versus sNPWT²

tNPWT comparative clinical outcomes but may be complicated to apply and intrusive and limit patient mobility²

sNPWT (PICO) is smaller and based on the same principles of action of tNPWT – expected to simplify the application and accessible to most patients²

Study end points:

- 1) To assess the percentage change in target wound area²
- 2) To assess percentage in the target ulcer depth and volume²

Why was the study performed?

This study evaluated whether PICO sNPWT was as effective as tNPWT at managing VLUs and DFUs 21



>6 million people affected by chronic wounds in USA³

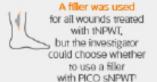


What was done?

A randomised, controlled study was performed at 18 centres in the USA and Canadal



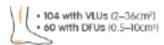
For 12 weeks or until closure of the target ulcer, patients were treated with either PICO sNPWT or tNPWT lone of four similar devices!



Which patients were included?



164 patients enrolled 2 with lower extremity ulcers 1>4 weeks duration)







* Venous leg ulcer; † Diabetic foot ulcer



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Case study two

Clinical scenario:

 This patient was admitted to hospital for an emergency laparotomy during the pandemic. She safely recovered from surgery, however, after a few days she developed a wound complication which was slow to respond with treatment while in hospital.



Date: 01/10/2020

Wound measurement: 5cm x 4cm, 4cm depth



Case study two continued

• She was discharged home to protect her from Covid-19 infection in hospital and to continue her recovery in the community under the care of the district nurses (DNs). The DNs were visiting daily and managing the wound with conventional dressings. However, the wound remained slow to progress.



Case study two

Clinical scenario:

 This patient was admitted to hospital for an emergency laparotomy during the pandemic. She safely recovered from surgery, however, after a few days she developed a wound complication which was slow to respond with treatment while in hospital.



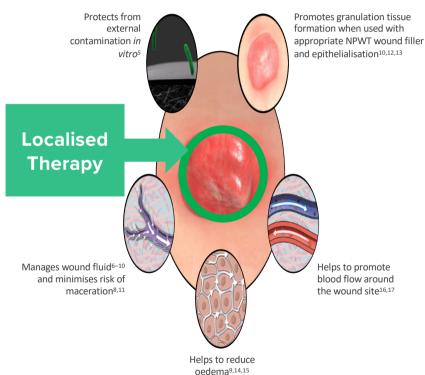
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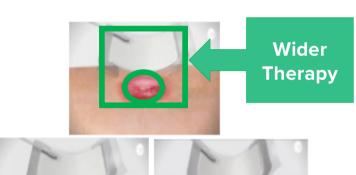
Wound measurement: 5cm x 4cm, 4cm depth

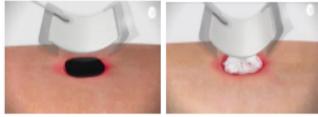


What are the benefits of tNPWT and sNPWT? 5-17

NPWT may work by multiple mechanisms of action⁷





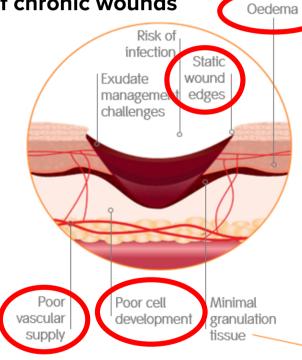


Use of wound fillers -No filler / foam / gauze



Chronic wound — zone of therapy 18

Anatomy of chronic wounds



Different factors can impact Identifying chronic the healing process¹⁸

- Wound aetiology
- Patient age
- Co-morbidities, e.g diabetes
- Wound size and depth
- Location of the wound

wounds¹⁸

For many wounds one or more of the following abnormalities may be present, which may delay or prevent healing:

- Ischaemia
- Infection
- Abnormal or persistent inflammation

TOP TIP

Granulation tissue that is present is often dark, dull and dusky red



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Case study two

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Date: 01/10/2020

Wound measurement: 5cm x 4cm, 4cm depth









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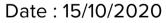
Case study — abdominal wound

Result:



Two weeks



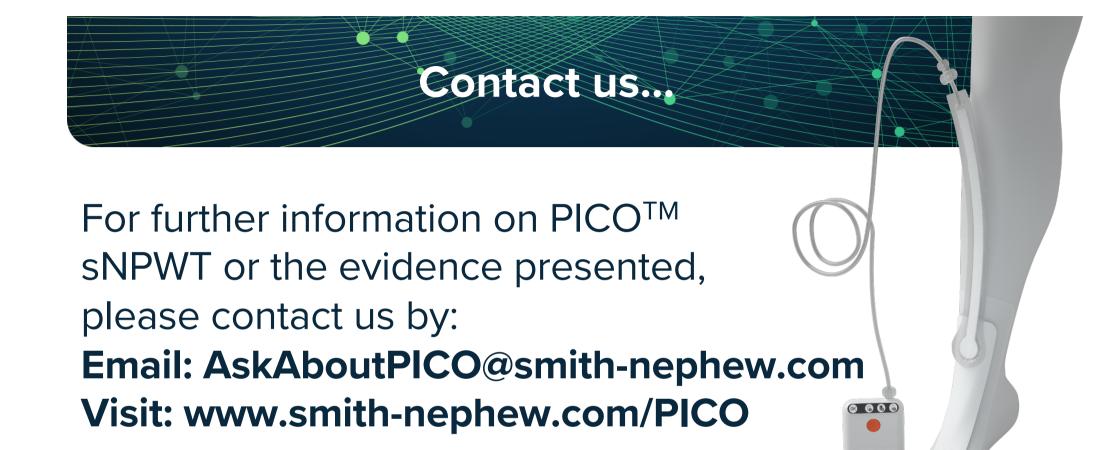


Wound measurement: 100% wound closure*

Date: 01/10/2020

Wound measurement: 5cm x 4cm, 4cm depth*







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