

# CASE STUDY: OPEN SURGICAL WOUND ON THE SHIN



## BACKGROUND

After a small surgery in January 2015, the sutures were removed and the incision partly dehisced. The patient is an 82 year old woman with no medical history except for arthrosis in the knees and hips. No daily medication, but anti-inflammatory medication was taken in shorter periods. No medication at the time of the surgery. Slight oedema which was not treated at the time of the surgery, but when the wound dehisced compression stockings were introduced and became well accepted by the patient. The patient is a non-smoker, slightly overweight with good nutritional status and mobility.

## CLINICAL ASSESSMENT AND TREATMENT

First consultation 22nd November 2015. The wound looked clean with very little non-viable tissue. The wound was presented with pale red/yellow tissue. Medium exudation level, clear and non-odorous. No signs of infection. The patient claimed the wound had been static both in terms of size and tissue type at least since February 2015. The wound had been treated with a variety of dressings like foams, wound contact layers and silver dressings. No clinical infection had been diagnosed. Sometimes, the patient experienced pain but couldn't specify if the pain was related to certain dressings, dressing changes or more oedema.

**At presentation - 22nd November 2015**  
(Figure 1)

The wound was cleansed with lukewarm tap water and Woulgan was applied with a foam dressing as secondary dressing. The wound was about 1,7 x 1,3 cm in size.

### After 3,5 weeks

- Wound size reduced
- Some yellow fibrin observed but an increase in granulation tissue present
- Less erythema and swollenness
- Wound has a clearer shape and wound edges are pale pink
- Some maceration of the surrounding skin but no debridement necessary

### After 10 weeks

- Granulation tissue increased, covering >90% of the wound bed
- No maceration



**Figure 1:** At presentation - The wound is rather dismal in it's appearance and has little healthy granulation tissue.



**Figure 2:** After 3,5 weeks of Woulgan treatment - The tissue has changed and become more healthy. Some fibrin, slightly more exudate and redness of surrounding skin, indicating active inflammation. No pain.



**Figure 3:** Week 10 of Woulgan treatment - The wound is much smaller in size and with less redness of the surrounding skin. No pain.

#### After 12 weeks

- Wound deteriorated due to high bioburden
- More oedema, pain and redness of the surrounding skin
- The wound was cleansed with PHMB and Woulgan was applied and covered with a non-traumatic secondary dressing
- Unfortunately, an adhesive dressing had been applied previously, which traumatized the fragile skin and resulted in two more small wounds

#### 29 February 2016

- After 16 weeks of Woulgan treatment, this very resistant stalled surgical wound healed
- At this time, the wound had been present for more than a year



**Figure 4:** After 12 weeks of Woulgan treatment - 2 more wounds had occurred due to an adhesive dressing used on the fragile skin.



**Figure 5:** 29 February 2016 - The wound is healed

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## RESULTS AND DISCUSSION

- This small but resistant dehisced surgical wound did not heal until Woulgan treatment was initiated
- Even with Woulgan the healing took 16 weeks, however considering the wound history, this was still regarded as a success
- The patient (who used compression stockings throughout the healing process) experienced the dressing changes and the application of Woulgan as comfortable, with very little pain
- The professionals claimed Woulgan was easy to use and experienced no safety issues