

# UNO+ HYBRID DRESSING

## HAND CASE STUDY IN MEXICO

Hand wounds are notorious for causing contractures when a wound is healing as the patient does not use the hand due to pain or fear of causing problems to the wound.

Brown E.Z. (1986) noted that complications of hand wounds can be divided into two groups, those associated with the wound bed and those associated with flap failure.

Complications are rare if the area is prepared well prior to surgery, however complications can be seen from hematoma's between the wound bed and graft, poor vascular supply, or shearing and friction.

The thicker the flap the longer the area takes to heal which potentially can lead to kinking or tension of the skin causing excess scarring.

**Negative Pressure Wound Therapy (NPWT)** providing a lateral downward force with the hybrid dressing can alleviate these problems leading to successful healing, less scarring and full mobility while the hand is healing.

## History

Patient needed a skin graft which is shown in Figure 1.

Following placement of a skin graft, patients have the potential to develop bleeding under the graft, displacement due to swelling or fluid collection, loss of sensation, scarring and uneven skin surfaces.

Recently published work highlighted that the use of a one piece silicon contact layer dressing with the use of **NPWT** can decrease the incidence of problems for skin grafting.

The lateral downward force prevents, movement of the graft, swelling and removes excess fluid while providing the ideal environment to allow healing safely.

## Method

Figure 2 shows the skin graft had lifted leaving an open wound with granulation and the ligament exposed. Due to the nature of the hybrid dressing having a silicon contact layer, the **NPWT** could be applied straight to the wound with a setting of 125mmHg. This was changed twice weekly for around 4 weeks where new epithelium was seen to be forming and the wound reduced in size and shape.

A simple dressing was used when the pump was removed and full healing achieved see Figure 3.

## Results

Figure 3 shows the wound fully contracted following application of **NPWT** for 4 weeks with the hybrid dressing. Scar formation is not proud and patient was advised to moisturise the area to prevent drying and cracking. Throughout treatment the patient was able to use his fingers, no stiffness or contractures were noted.

Reference Brown EZ. (1986) Complications of skin grafts and pedicle grafts. Hand clinic. 1986 May;2(2):353-9 PMID:3517018 Pub med.



Figure 1



Figure 2



Figure 3