Just in the Nick of T.I.M.E.S.

The importance of debridement for wound assessment

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Situation

Patient

72 year old man with previous history of radiation treatment for cancer to neck.

Active with no other major co morbidities.

3 week old traumatic injury to left hand sustained while sailing with leather glove on and hand was caught and dragged into a pulley.

Initial treatment

Patient visited local Emergency Department who advised him it was a skin tear. Wound was dressed with net dressing and cotton combine and advised to see local GP in 3 days. GP advised patient to soak every night for 30 mins in warm saline and let it dry to heal.

Figure 1: Wound at 3 weeks

Figure 2: 18 hours of plastic wrap on hand

Figure 3: First dressing change after 24 hours

Figure 4: Wound after first dressing change

Action(s) taken/treatment provided

New treatment regime

After 3 weeks, wound was covered in hardened necrotic tissue (Figure 1). This was noticed by wound clinician who advised to plastic wrap the wound overnight and visit hospital the following day, with aim to soften the eschar for assessment and to examine the true extent of the injury and wound bed (Figure 2).

Upon visit to the hospital, a monofilament fibre lolly* used to mechanically debride outer necrotic eschar.

Gel dressing** applied, covered with a Surgical dressing**, for further autolytic debridement and soften eschar for better and deeper wound assessment of hand structures.

Wound had minimal exudate and no pain for patient.

The dressing was changed after 24 hours. (Figure 3). The eschar had softened, The gel dressing absorbed excess exudate and no maceration around wound edge (Figure 4).

The monofilament fibre lolly was used by patient to mechanically debride the wound (Figure 5). The divice was very well tolerated with patient reporting no pain.

Once mechanical debridement was complete, a full assessment of the wound was performed, using T.I.M.E.S (tissue, infection, moisture, edges, surrounding skin).

Full surrounding peri-wound area boggy to touch and tendons on view (Figure 6).

Wound assessment revealed that this was no longer an acute wound for healing in community and further intervention was required.

Patient was sent for Plastic Surgery consult via Emergency Department at Princess Alexandra Hospital. A letter from clinician with history and wound assessment was sent with patient.

Figure 5: Patient self-treatment with monofilament fibre lolly

Figure 6: After dressing change and mechanical debridement

Outcome(s)

The use of the monofilament fibre lolly and the gel dressing enabled full assessment of this wound bed in 24-36 hours and a fast decision was made to intervene surgically.

Patient received a skin graft within 24 hours.

The donor and recipient sites were treated with biocellulose hydrobalance dressing**** for pain relief, faster epithelialisation and less scarring. After 3 months, the hand wound had healed with full use and movement for the patient (Figure 8).

Figure 7: 10 days post-skin graft

Figure 8: 3 months post-graft

Figure 9: 7 months post-graft

* Debrisoft® Lolly (Lohmann & Rauscher)
** Suprasorb® G (Lohmann & Rauscher)
*** Curapor ® (Lohmann & Rauscher)
**** Suprasorb® X (Lohmann & Rauscher)

Lesson(s) learned

The monofilament fibre lolly and the gel dressing are two simple, easy to use, community based products which, through the combination of mechanical and autolytic debridement, allowed for full assessment of the wound bed. The treating clinician was able to assess, dress, reassess and refer, resulting in a fast decision to send the patient for surgical intervention. Consequently the patient's wound has fully healed and he has regained full use and movement of his hand.