TREATING A DEHISCED LAPAROTOMY WOUND

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The patient was a 68-year-old woman with a history of bowel disease who presented with a dehiscence laparotomy wound following the formation of a stoma. The wound was 28.5x20cm wide and 3cm in depth, with the wound bed consisting of 30% sloughy tissue and 70% subcutaneous tissue. There was no infection evident and exudate was low in volume and viscosity (Figure 1).

She was immediately commenced on topical negative therapy (TNP) using AMD Gaugio (Covidien, Mansfield MA). The dressing was changed every 48 hours.

She continued with this regimen for eight weeks. On review, the wound measured 26x2.5 and 1.5cm in depth and had a wound bed consisting of 100% granulation tissue. However, the wound appeared to be critically colonised as no progress had occurred for the preceding two weeks (Figure 2). The patient was also being discharged home from convalescence care and did not feel able to deal with the TNP system at home as she lived by herself.

At this point the patient's wound was managed using Silvercel ribbon (Syntexor, Crawley) secured with an AlloHeal Adhesive dressing (Coloplast, Peterborough) and was changed as exudate dictated.

The wound continued to be treated with topical antifungal and was no signs of improvement.

At the first treatment review after four weeks, the wound measured 13x20cm and was 1cm in depth. The tissue present was 100% granulation, no infection was evident, and the exudate was of medium volume and viscosity (Figure 3). As the silver dressing had failed to produce consistent improvement, it was decided to switch the primary dressing to Suprasorb X+PHMB (Activa Healthcare, Burton-upon-Trent).

The patient presented to the clinic two weeks later and the wound had reduced in size to measure 12x1.9cm and 1.3cm in depth (Figure 4). The wound bed consisted of 100% granulation tissue, exudate levels had increased and viscosity was low. There was no infection present and a wound swab confirmed the existence of Pseudomonas aeruginosa. Management with Suprasorb X+PHMB was continued but due to the increased exudate volume, dressing changes became daily rather than every 2-3 days as before. Wound swabs identified the presence of methicillin-resistant Staphylococcus aureus and Pseudomonas aeruginosa. No antibiotic therapy was commenced.

When the wound was reviewed a week later it had continued to improve and now measured 11x1.9cm and 6cm in depth (Figure 5). The wound remained granular, exudate had reduced in volume, and the exudate was gone. A swab was taken that showed no evidence of P. aeruginosa but MRSA was present. It was decided to continue with the current treatment regimen as it was providing positive clinical outcomes, the wound was only colonised with MRSA and no infection or critical colonisation was evident.

The wound continues to be treated with Suprasorb X+PHMB and secured with AlloHeal adhesive as the secondary dressing. Dressing frequency was reduced to alternate days. The results from this case would suggest that the wound had stopped healing due to the presence of bacteria critically colonising the wound. Suprasorb X+PHMB appeared to kick start the wound into healing and was effective in managing the development of a local infection and facilitating healing.

The ongoing treatment with Suprasorb X+PHMB rebalanced the wound, reducing the level of bacteria present and allowing the wound to continue to heal.

Figure 2: The granulation development and reduction in exudate indicates the TNP can be stopped.

Figure 3: A blister, non-healing wound with evidence of previous healing in the form of reduction in depth and epithelium at one margin.

Figure 4: In this image the wound has a thin layer of slough across its surface.

Figure 5: The wound has begun to epithelialise at the left margin and is contracting.