

A multi-disciplinary approach to the care of a patient using ActiVac® with a bridging dressing

S. M. Hagelstein, N. M. Ivins, K, G, Harding.

Introduction

The following case study follows the treatment of a patient with a complex wound with the use of negative pressure wound therapy in a community setting.

Patient A is a 78-year-old gentleman who presented with a long term medical history of paraplegia following an industrial accident fifty years ago. Other co-morbidities include hypothyroidism and has previous repair of an aortic aneurysm. Patient A has had a long history of recurrent pressure ulceration and four rotational skin flaps to repair them.

Method

Patient A presented in the clinic May 2015 with another category four pressure ulcer to his right ischial tuberosity, x-ray and bloods were taken which showed Patient A had osteomyelitis. The osteomyelitis was successfully treated over a 6-week period combined with daily visits from his community nursing team to redress the wound. Patient A became quite restricted by the prolonged required bedrest which he found quite depressing. At this time he was also re-assessed for all the pressure relieving equipment being used.

Results of an x-ray and bloods confirmed no presence of osteomyelitis, however the wound continued to heavily exude. The wound measured 1.5 x 1.0 cm with a depth of 2.0 cm, and was undermining at 6 o'clock on a body map of 4.6 cm. Patient A continued to be monitored in the out-patient clinic for a number of months with very little progress. Another area of undermining at 1 o'clock on the body map opened up which measured 5.0 cm. A bone biopsy was taken to rule out osteomyelitis, the results were negative. Following a consultation in the outpatients' clinic it was decided that negative pressure wound therapy would be a suitable treatment with the aim of controlling the exudate, decrease the frequency of dressing changes and increasing the percentage of granulation tissue present in the wound. Due to the location of the wound the ActiVac with bridging dressing was initiated.

Results

At commencement of treatment the wound measured 2.0 x 0.9 cm with a depth of 3.8 cm. Undermining had increased at 6 o'clock to 6.9 cm but had remained the same at 1 o'clock 5.1 cm. A small sinus adjacent to the wound had opened up and this was undermining 3.5 cm at 12 o'clock on the body map. It was thought that the two areas could possibly be connected. The wound edge was static with the peri-ulcer skin assessed as being fragile with a large amount of scarring.

Dressings were changed three times a week due to the amount of exudate and the position of the dressing. The wound cavity was flushed using an antimicrobial irrigation fluid. The peri-ulcer skin was treated with a barrier skin protectant and the wound edge lined with the ActiVac® drapes. The cavity and undermining areas were packed using a white foam dressing with a small piece of black foam to cover the area before the ActiVac® drapes were applied. The new sinus was lightly packed with a gel fibre dressing and secured in place with the drapes from the ActiVac®. The bridging dressing was applied after the drapes and secured to Patient A 'S thigh.

By the second week of using the ActiVac® the small sinus had closed. The larger wound had also improved and now measured 1.8 x 0.8 cm with a depth of 2.8 cm with the undermining at 6 o'clock measuring 5.3cm and at 1 o'clock on the body map being 4.2cm. The dressing regimen remained the same and improvements were seen in the level of exudate and the surrounding skin.

At week six improvement continued the depth had decreased by 0.5 cm and the undermining now measured at 6 o'clock on the body map 3.9 cm and at 1 o'clock on the body map 3.0 cm. Surrounding skin had remained in good condition and Patient A was feeling much better. It was decided to continue with the ActiVac® negative pressure system as improvement had been achieved for this patient.



Discussion

Care was shared with the community nursing team and the research nurses from the Welsh Wound Innovation Centre. Patient A's quality of life improved while using the ActiVac® he was able to go out more as the nurses were not calling every day.

Conclusion

Patient A benefited from using the ActiVac® negative pressure therapy system with the bridging dressing for treating his pressure ulcer. Having a tailored care plan for this gentleman proved to be very important, it allowed a multidisciplinary approach, reducing nursing visits for dressing changes.