Case study

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Case presentation

This young female patient was referred to the breast centre with a wound which developed two weeks after breast augmentation in early 2022. Up to this point, the patient had been self-managing her wound. Increasing soreness at the base of her left breast, and the fact that the patient was worried the wound might potentially be infected, resulted in her seeking medical advice.

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Management of a wound after breast surgery using ACTICOAT^{\$} FLEX 3 Antimicrobial Barrier Dressing and PICO^{\$} 14 single-use Negative Pressure Wound Therapy (sNPWT)



The patient was seen by a consultant breast surgeon, who arranged an ultrasound, which showed that the breast implant was not infected. A referral was made to the Tissue Viability Nurse specialist to see if the wound could be managed as the patient did not want the implants removed. The patient was commenced on oral antibiotics 3 weeks post-surgery for 4 weeks to reduce risk of infection.

Treatment and results

The patient suffered with anxiety and was very upset and concerned about the appearance of her breasts and long-term outcomes. The patient was unable to work due to the wound as it was difficult finding suitable clothes. Physically, she struggled to lift the arm due to concerns about the possible effect on the wound and was unable to shower. As seen on Image 1, there were 3 visible small wounds with evidence of undermining, with moderate to high levels of exudate. Daily dressing changes were carried out with a gelling fiber and foam dressing as shown in Table 1 The wound was assessed as being at high risk of infection.

Number of weeks after surgery	Size - length x width in cms	Level of exduate	Wound description	Product used	Number of dressing changes per week
2	Not recorded	Moderate	Not recorded	Gelling fiber and foam	>3
3	13 x 6 undermining and deteriorating	Moderate	Granulation 10% Slough 90%	ACTICOAT FLEX 3 Antimicrobial Dressing and film dressing	3
4	11 x 5 static	Moderate	Granulation 10% Slough 85%	Regime continued	3
5	8 x 4 improving	Moderate	N/A	Regime continued	2
7	9 x 3 improving	Moderate	Epithelialising 10% Granulating 50% Slough 40%	PICO 14 sNPWT 20 x 20cm	2
8	3.75 x 3	Not recorded	Not recorded	Not recorded	Not recorded
19	1 x 1	Not recorded	Not recorded	Foam	Not recorded

Outcomes

The size of the wound saw a measurable decrease between week 3 and week 5 (Table 1). The percentage of slough had also decreased from 90% to 40%; week 3 and week 7 respectively. During this period the patient was seen by a breast surgeon, who was very positive about the progress made. At 7 weeks the woundbed was improving but not in wound size. PICO 14 sNPWT was introduced and after one week of treatment the wound size reduced from 9x3cm to 3.75x3cm (Table 1). Oedema was visibly reduced which optimised the aesthetic outcome. The patient felt a high level of comfort and security in the treatment.

Conclusion

A key aspect of this case was the introduction of ACTICOAT FLEX 3 dressing and PICO 14 sNPWT in the treatment plan which contributed overall to a reduction in the number of dressing changes, improved the percentage of slough, and helped to promote granulation. While using PICO 14 sNPWT exudate was well controlled with twice a week dressing changes. No secondary infection occurred, and the clinician felt that treatment helped expedite healing time and closure of the wound. The patient was happy with the positive outcome and salvage of the implant while maintaining good aesthetic appearance. Overall, the patient experienced a positive impact on her well-being.

> Table 1 Wound measurements and products used



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Image 1 4 weeks after surgery – wound measurements 13cm x 6cm with undermining, showing signs of deterioration. ACTICOAT FLEX 3 dressing and film dressing regime





Image 2 and 3 8 weeks after surgery - after one week of PICO 14 sNPWT treatment



Image 4 14 weeks after surgery while using PICO 14 sNPWT



Image 5 16 weeks after surgery wound measurements 1cm x 1cm. Foam dressing applied

Results may vary

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