MANAGEMENT OF AN ANTEREOLATERAL THIGH FLAP WOUND

KATHLEEN CORNELIUS
STAFF NURSE, FREEMAN HOSPITAL NEWCASTLE, HIGH HEATON, NE7 7ON

Introduction

Treatment of tonsillar carcinoma is complicated. It requires a multidisciplinary approach and must be individualized to the patient for the best possible patient outcome.
Accepted treatments include any combination of surgery, radiotherapy, and chemotherapy.

The anteriolateral thigh (ALT) flap has emerged as a popular option for reconstruction of head and neck defects. Advantages include the provision of a large amount of tissue and so is suited for coverage of a large defect, such as a neck resection, whilst ensuring minimal donor site morbidity and preserving major muscle function. Management of the ALT site poses a unique problem because of the large area of tissue that may be harvested. Generally, the ALT site can be primarily closed or grafted with a split thickness skin graft if the area is too broad. Factors that affect the rate of healing of such a site may include the site, size, depth, infection, choice of dressing and friction as well as the overall health of the patient. This communication describes the management of an ALT flap wound site following a tumour-based reconstruction with an ALT flap.

Case history

A 54 year old patient with a medical history of COPD, alcohol excess, psoriasis, heart bypass operation and obstruction (non malignant) was diagnosed with left tonsil tumour following a panendoscopy and biopsy and was treated with radiotherapy. Five months later, the patient was diagnosed with tonsillar carcinoma, radio residual squamous cell carcinoma, left tonsil with neck metastasis.

Following multidiscipline discussion the patient was booked for left comprehensive neck dissection, mandibulotomy, and wide local excision of tonsil and tumour-based reconstruction with ALT flap and laryngectomy. The patient required a feeding tube (percutaneous endoscopic gastrostomy [PEG]), and a tracheostomy tube was employed to protect his lung from salivary leak, following the formation of a fistula after the major surgery. The ALT site was grafted with a split thickness autogenous skin graft, however when the initial dressing was removed after 8 days the wound was infected.

Treatment with Flaminal®

As the ALT site had become infected, wound treatment consisted of an antimicrobial wound care dressing, Flaminal® Forte initially and then Flaminal® Hydro. Mepitel, gauze and Hypafix were selected as secondary dressings.

Initial wound measurements were; maximum width 9cm, maximum length 16cm and maximum depth 2cm.
The wound was regularly assessed for visual signs of infection and the patient asked for any non-visible signs. Further, the patient was involved in the choice of treatment plan.

Day 18

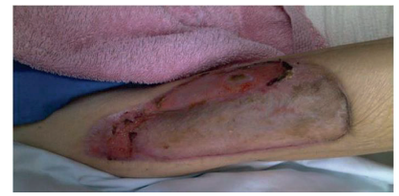
The wound was dressed daily with Flaminal® Forte until exudate levels decreased and then dressed with Flaminal ® Hydro. By Day 18, dressing changes were made every other day or as needed and the wound measured 8cm by 15cm.

Day 46

As the wound progressed through the healing process the wound became two; measurements were 14cm by 4cm and 8.5cm by 6cm.

Day 88

The wound had almost completely healed. Dressing changes were easy, relatively pain free and exudate level were managed well.



Discussion

For the wound to achieve healing through secondary intention a suitable wound care product must be selected.
The main principles of wound management in this context are to[1]:

- Protect the area from dehydration once exudate levels decrease
- Prevent further mechanical trauma, to reduce pain,
- to minimize leakage of exudate
- Promote rapid, infection-free healing
- Be practical to apply and remove
- Require minimal maintenance
- Be inexpensive

The patient presented a significant challenge as he was immunosuppressed and required a feeding tube. Further, the ALT site was infected. Therefore, treatment of the ALT site was with Flaminal ® (Flen Pharma), an enzyme alginogel ®. Flaminal ® has properties of a hydrogel and an alginate combined with an antimicrobial enzyme complex (glucose oxidase combined with lactoperoxidase stabilized with guaiacol)[2]. As a result of its unique structure, Flaminal ® can be applied to dry or exuding wounds to facilitate healing, and it can be applied to any wound irrespective of its bacterial bioburden. Flaminal® is available in two formulations: Flaminal® Forte for moderate to heavily exuding wounds and Flaminal® Hydro for low to moderately exuding wounds. Therefore Flaminal® was considered as a suitable wound care product for the management of the ALT site.
As the team learnt to listen to the patient, the patient in turn learnt to trust the multidisciplinary team.

This insured the plan of care was individualized and so had a greater chance of success. Complete healing of the donor site was achieved with Flaminal® Forte and Hydro.
The enzyme alginogel controlled infection, managed exudate, reduced pain and promoted healing/ granulation tissue. It is a simple, cost-effective, dressing regime.

Conclusion

As a result of the multiple disciplines involved, we were able to achieve wound healing by secondary intention in a highly challenging wound using
Flaminal ®.

Reference List

1. Beldon P. Skin grafts 2: management of donor site wounds in the community. Br J Community Nurs 2003 Sep; 8(9 Suppl):S6-S14.
2. White R. Flaminal: a novel approach to wound bioburden control.Wounds UK 2006;2(3):64-9.

Flen Health
advanced skin healing