

Clinical approach to a complex wound in prison: blunt trauma

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CLINICAL DESCRIPTION OF CASE

The patient was a 51-year-old man who came to the treatment room with a blunt trauma of several days evolution after receiving a blow with a chair on the left leg on 28 February 2024, stating that the “the injury hasn’t got any better”. He presented a soft, swollen subcutaneous hematoma that supplicated serous fluid. Given the progression, the medical staff prescribed antibiotics with clindamycin and nursing staff applied programmed daily dressings with mupirocin until an improvement was seen.

Medical history: allergic to penicillin, did not present high blood pressure, dyslipidaemia, or type 2 diabetes mellitus. No signs of venous insufficiency were observed in the lower limbs.

Functional patterns affected:

- Activity-exercise: mobility and sensitivity of left leg conserved in initial phases.
- Nutrition-metabolism: lesion with effect on muscle and risk of infection.
- Perception-management of health: did not present fever or body temperature fluctuations. Smoker (12 cigarettes/day). Correct anti-tetanus vaccination.

PROGRESS

The patient was transferred to the Marques de Valdecilla University Hospital on 12 March 2024 as the wound had progressed to a deep, open lesion of approximately 4x4 cm. Serohaematic fluid was exuded when pressure was applied, presenting clots adhering

to the inner faces with no exposed bone, and cellulite edges and malleolar oedema. We had doubts about applying treatment with scalpels in the treatment room. Patient presented weak pedis pulse (Figure 1).

Anamnesis, examination and analyses were carried out at the hospital, with no signs of increased acute phase reactants being observed while the other values with within range¹.

Efforts to drain the area produced unsatisfactory results and so debridement was carried out with local analgesia (2% Mepivacaine) at the edges of the wound, along with exhaustive washing and negative pressure wound therapy² (Vacuum Assisted Closure VAC[®])³ at -80 mmHg for 7 days to encourage granulation tissue creation, improve the bed and bring about the best



Figure 1. Initial wound.

possible exposure for external surgical intervention via skin graft covering and fixing using the patient's own skin from the same leg under general anaesthesia. There would therefore be two wounds: the donor site

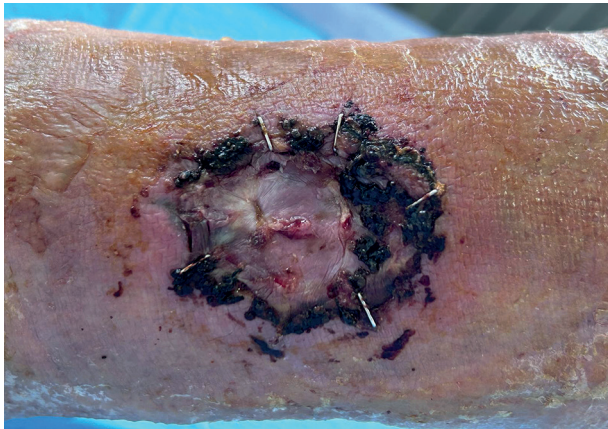


Figure 2. Implanted graft.



Figure 3. First treatment in donor/recipient site.



Figure 4. Treatment phase.

and recipient site (Figures 2 and 3). The patient remained for 16 days at the hospital prison unit and nursing module until he was finally discharged by the Plastic Surgery Service on 2 April 2024 (Figure 4).

FINAL COMMENTS

The nursing team at El Dueso Prison followed the treatment protocol recommended by the Plastic and Reconstructive Surgery Service. The donor site was treated with Vaseline and the recipient site was treated with Betagel, Urgotul dressings and bandages. The staples were removed at the hospital. The patient's transfers and consultations were also managed, thus ensuring comprehensive and coordinated treatment. This type of multidisciplinary intervention demonstrates the importance of a nursing-based focus on managing complex wounds to ensure continuity of care and the patient's effective rehabilitation.

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