

# The importance of immediate and necessary care in lower limb management

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**Introduction:** Immediate and necessary care for lower limb wounds involves several key steps depending on the type of ulcer (e.g., venous or arterial), and any underlying conditions<sup>1</sup>. Immediate and necessary care is crucial in order to prevent deterioration and promote healing. This poster will demonstrate how a delay in receiving treatment caused a simple trauma injury (Fig. 1) to deteriorate causing infection, delayed healing, stress and discomfort to a 78-year-old lady.

**Method:** On September 4th, while walking her dog, Betty sustained a leg injury caused by her dog's lead (see Fig. 1). She managed the wound herself for two weeks, applying antiseptic cream. However, as the wound deteriorated, a friend advised her to seek medical help. Betty consulted both her GP and a practice nurse, who suspected an infection. She was initially prescribed Flucloxacillin and instructed to keep the wound uncovered. When Betty couldn't tolerate this antibiotic, it was switched to Co-amoxiclav the following day. Despite the antibiotics, Betty's wound continued to deteriorate, prompting another visit to her surgery two weeks later. A swab was taken, which later confirmed a pseudomonas infection, leading to a second course of Co-amoxiclav. By October 13th, five weeks after the injury (see Fig. 4), the wound had still not improved. To enhance circulation, Betty was advised to wear flight socks. As her wound condition continued to deteriorate, her pain became more severe, and she was prescribed oral Pregabalin to manage nerve-related pain. However, this medication was discontinued after a week due to intolerable leg swelling (oedema) as a side effect.

**Discussion:** Chronic lower limb wounds are a significant burden on patients and healthcare systems, and can be classified into several types, including venous, arterial and mixed venous and arterial ulcers. Venous leg ulcers are particularly common and result from venous insufficiency, leading to venous hypertension and subsequent tissue hypoxia. Chronic wounds, including venous leg ulcers, are characterised by a failure to progress through normal healing stages and are often associated with co-morbidities such as diabetes and peripheral vascular disease. Effective management of these wounds requires holistic assessment, accurate diagnosis, appropriate wound treatment strategies and when arterial disease is excluded, compression therapy. By implementing immediate and necessary care, healthcare providers can significantly reduce the risk of infection, accelerate healing, and minimise patient discomfort. This care typically involves thorough cleansing of the affected area, appropriate dressing selection, and the application of compression therapy when indicated. Early assessment and treatment can prevent the progression of localised wound infections, which if left untreated, may lead to more severe complications and delayed healing. Additionally, timely care helps manage exudate, reduces oedema, and improves overall circulation, all of which contribute to faster healing and decreased patient stress. By addressing these issues promptly, healthcare professionals can significantly enhance patient outcomes and quality of life.

**Results:** On November 1st, eight weeks after the incident, Betty attended her local leg ulcer clinic for the first time, where she received a full holistic assessment, leading to a diagnosis of a venous leg ulcer (see Fig. 4). Her care plan included hygiene measures, emollient hydration, and the application of an antimicrobial wound contact dressing, followed by a cohesive, inelastic compression bandage to provide strong compression (Actico®). A week later, the wound showed signs of improvement, and oedema levels had reduced, leading to Betty being prescribed a leg ulcer hosiery kit (Activa®), which, while reducing bandage bulk and improving aesthetics, still provided the necessary compression for healing. Following 7 weeks of treatment, the wound had improved significantly and reduced in size from 6.5cm x 5.5cm (Fig. 4) to 2.5cm x 2cm (Fig. 5). Using an iodine-impregnated contact material and continued use of the hosiery kit, after 12 weeks of treatment, the wound had completely healed (Fig 6).



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**Conclusion:** Delayed intervention in lower limb wounds can significantly impact healing, leading to infections, deterioration, and prolonged recovery<sup>2</sup>. Chronic wounds, such as venous leg ulcers, pose substantial challenges to healthcare providers due to their complex nature and the resources required for treatment. Delays in treatment can exacerbate these issues, as timely and appropriate care is crucial for effective healing.