

Can the NICE recommended treatment for DFUs be effective where concordance with usual standards of care is a challenge?



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Introduction

The treatment of the patient living with a diabetic foot ulcer (DFU) is complex and multifactorial. The ideal standard of care involves metabolic control, prevention and management of infection, active debridement and offloading. However, for these interventions to be effective the patient has to be empowered to manage their diabetes on a daily basis and consistently use their offloading device.

The author is a clinician in a hospital within a rural setting in the Republic of Ireland. The local DFU population face cultural and socioeconomic challenges that make concordance with the optimal standards of care challenging.

In 2019 The National Institute for Health and Care Excellence (NICE) published guidance on the use of **UrgoStart** treatment to improve outcomes in DFUs. It is recommended that this is utilised along with usual standards of care. The author proposed that despite the challenges in optimising standards of care with a number of patients, could the **UrgoStart** treatment range in the form of either the **UrgoStart Plus Pad** or the **UrgoStart Plus Border**, still be effective in healing their wounds. This poster discusses the clinical outcomes when implementing **UrgoStart Plus Pad** and **UrgoStart Plus Border** for two challenging cases.

Method & Results

Case Study 1

A 50 year old man presented with type 1 insulin dependent diabetes who had poor concordance with diabetes control and an increase in HBA1c of 122mmols-139mmols over two years and previous myocardial infarction and stent insertion. An angiogram identified no significant stenosis with biphasic pulses. The patient had worn new trainers which had caused a blister to the posterior of left 1st digit. He sought no treatment until presenting at the emergency department with infection. He was discharged on oral antibiotics. The Public Health Nurse (PHN) referred him to acute podiatry. On assessment it was identified that the patient did not wear his off loading device. He was a driver by occupation and continued to wear the trainers which had caused the original injury. In addition he had also not collected prescriptions for insulin for the previous six months.

Despite a lack of standard of care in offloading and metabolic control, the aim was to optimise what could be controlled i.e. debridement and topical wound treatment. Therefore, **UrgoStart Plus Pad** was initiated to rebalance matrix metalloproteinases and provide maintenance wound debridement. Two wounds were present 1.5cm x 1.5cm and 0.5cm x 0.5cm (*Figure 1*). Both wound beds had 100% slough with macerated surrounding skin. Dressings were changed twice weekly. Within two weeks the wound reduced to 1cm x 1cm with the smaller wound remaining static. An episode of infection was treated effectively with **UrgoClean Ag** and oral antibiotics. The largest wound healed within six weeks (*Figure 4*). The smaller wound improved but then deteriorated potentially due to osteomyelitis. Treatment for this wound is ongoing.



Case Study 2

A 66 year old man presented with a history of insulin controlled type 2 diabetes. He had neuro ischaemic feet, right Charcot foot, chronic kidney disease, high BMI and history of poor concordance with all treatment. HBA1c was 122mmols on presentation. Offloading footwear was worn to both feet. General engagement with his condition and foot ulcers was poor. He presented to the acute podiatry service with a six month history of a wound to his left heel and one to the mid planter area of the right foot. Multiple dressing regimes had been used unsuccessfully by the healthcare professional involved.

On presentation the heel ulcer was 100% slough 1.5cm x 1.5cm x 0.7cm deep (*Figure 1*). The planter ulcer 2cm x 2cm was superficial and macerated with one small area 0.4 x 0.4cm with a depth of 0.4cm (*Figure 4*). **UrgoStart Plus Pad** was commenced on both wounds, changed twice weekly. After five months of treatment the heel ulcer was 0.5cm x 1cm 0.2 cm deep 100% granulation (*Figure 3*) and the planter ulcer was 0.5cm x 0.2cm superficial and 100% granulation (*Figure 6*). Treatment was complicated by three admissions to hospital for local and systemic infection with active Charcot disease. During treatment his HBA1c reduced to 55mmols.



Discussion

Both case studies provided the author with numerous challenges that despite appropriate engagement, the patients were still unable to optimise their care. However some success was achieved as a result of using the **UrgoStart Plus Pad** and **UrgoStart Plus Border** in these challenging cases. In case study two, the patient's motivation improved at witnessing consistent progression in his wounds which resulted in improved glycaemic control reducing his HBA1c from 122 to 55.

Conclusion

Although the NICE guidance states all standards of care need to be optimised for successful treatment of DFU, the author has experienced positive outcomes when **UrgoStart Plus Pad** and **UrgoStart Plus Border** is used in patients where optimisation is challenging. This treatment will continue to be available locally for patients who are complex and present with management challenges.