Introduction

The incidence of diabetes is increasing in the United Kingdom, and consequently so is the incidence of associated foot complications. While neuropathic ulceration has always been the most prevalent type of foot ulcer, there is now an increase in tissue damage where neuroischaemia is a contributory factor. In a recent publication, the challenge of providing Podiatry Services within Primary Care to deal with the diabetic foot ulcer presented a significant problem. The management of foot ulcers in diabetic patients is complex and challenging. It is vital that the Podiatry Services have access to a range of treatment options, and have the knowledge to implement them.

Case Study 1

A fifty-six year old, Type 2 diabetic female underwent an amputation of her left hallux following infection sustained in a neuropathic ulcer. The ulcer was observed to be necrotic and showed signs of infection. At six weeks of treatment, the wound was observed to be healing.

Case Study 2

A sixty-two year old female with Type 2 diabetes and neuropathy of the feet developed a lateral ulceration (Texas grade BI 3+) over her left 5th metatarsal head. The ulcer was debrided and a wound bed developed. The ulcer was then dressed with Kendall AMD antimicrobial foam dressing and, following 5 weeks of treatment, progressed to healing.

Case Study 3

A seventy-six year old female with Type 2 diabetes and foot neuropathy presented at the podiatry clinic after surgery where 2-4th toes of her right foot were amputated. After assessment, the wound was debrided using Versajet® Hydrotherapy System. At this point, the wound could be probed to bone and therefore surgical intervention was considered to be an option. However, Kendall AMD antimicrobial foam dressing was applied to the wound, which was then closely observed for signs of further deterioration. The wound resolved in 6 weeks with further surgery for the patient being avoided. The patient expressed her delight that she did not have to be readmitted for further surgical interventions.

Case Study 4

A fifty-two year old, Type 2 diabetic male presented with a neuropathic ulcer under his right hallux. The management plan was to offload the affected area to prevent further pressure damage and to apply Kendall AMD antimicrobial foam dressing as the dressing of choice to the wound to provide a bacterial barrier and absorb exudate. This proved to be successful as the wound progressed to full healing in 5 weeks without infection developing.

Discussion

The management of foot ulcers in the diabetic patient is complex and challenging. It is vital that the Podiatry Services have access to a range of treatment options, and have the knowledge to implement them. The use of effective, topical antimicrobial agents is an essential treatment option, which should be considered in this group of patients who are at high risk for infection. As such, they need a bacterial barrier in contact with the wound surface. While PHMB is not a new antibacterial agent, its use in wound care is relatively new. It emerged as the antimicrobial agent within gauze dressing, and became utilisable as filler of the NPWT systems where the Chariker-Jeter technique is used. However, the more recent presentation of PHMB impregnated within a foam dressing (Kendall AMD antimicrobial foam dressing) is a positive development, where an absorbent dressing that may cushion the wound is required.

References: