

Multidisciplinary wound therapy clinic service

Katherine Kidman, Laura Batty

Multidisciplinary working has been shown to have a positive effect in the treatment of the diabetic foot (Dang and Boulton, 2003). The multidisciplinary approach between the podiatry team and wound clinic provides a combination of knowledge and skills to facilitate the best possible outcome for the person with the diabetic foot ulcer. The skill mix between the diabetes specialist podiatrists and tissue viability nurses within Medway PCT has been shown to be very effective through feedback from people with diabetes and the ability to deliver appropriate treatment. Owing to the numbers of diabetic foot ulcers seen in the diabetes podiatry clinic, which is currently over 60 patients per week, links are essential with the community wound specialist nurses. This article describes the setup of a multidisciplinary wound therapy clinic service at Medway PCT, and some treatment options available at the clinic. This ensures that patients are seen regularly for dressing changes and wound assessment.

It is estimated that there are 2.23 million people in the UK with diabetes, and up to half a million people with undiagnosed diabetes (Diabetes UK, 2007). Foot ulcers are a common complication of diabetes with 5% of people with diabetes experiencing an ulcer (NICE, 2004). Foot complications are the most common cause of hospital admissions in people with diabetes (Dang and Boulton, 2003) and also have a much wider economic and social burden (Boulton et al, 2005). Long-term ulceration can result in loss of earnings through time spent out of work, depression, restricted lifestyle and strain on the family unit. A study of 14 people with diabetes

and ulceration, carried out by Brod (1998), involving focus groups with discussions on Quality of Life issues including social and family life, emotional impact, physical ability and health and financial effects of diabetes and foot ulcers supports this observation. As expected, a foot ulcer impacts on the individual's working life and, subsequently, their financial situation, as practitioners will advise rest and immobility until the ulcer heals or improves. In the interviews carried out by Ashford et al (2000), they found that 11 out of 14 individuals either lost or gave up work. Brod (1998) highlights the free healthcare system in the UK that removes healthcare costs directly due to the ulcer;

Article points

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2. The GPs in Medway PCT opted out of wound care provision in 2006 following discussion with primary care nursing staff. In response, the community tissue viability team established a wound therapy clinic for people with diabetic foot problems who are mobile and, therefore, do not require a home visit.
3. This article provides an overview of some of the treatment options where the podiatry clinic and wound care team work closely.

Key words

- Multidisciplinary care
- Wound care
- Vacuum-assisted closure therapy
- Larval therapy
- Intravenous antibiotic therapy

Katherine Kidman and Laura Batty are Diabetes Specialist Podiatrists at Medway Maritime Hospital, Kent.

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1. The GPs in Medway PCT opted out of wound care provision in 2006 following discussion with primary care nursing staff.
2. The podiatry clinic has established excellent links with the wound therapists spending time in each clinic to ensure clear understanding of each profession.
3. People with diabetic foot problems can be referred between podiatry clinics and wound clinics and seen within 24 hours.
4. Understanding one another's role and responsibilities enables the multidisciplinary team to work together efficiently.
5. For those people with diabetes who require admission into hospital or urgent vascular assessment due to deterioration of their foot problem, the wound clinic will refer directly to podiatry on the same day.

however, patients found that costs related to transport and appropriate footwear impacted on their financial situation.

At Medway PCT, the authors developed the podiatry service to try to prevent unnecessary admissions. The development of the wound care clinic allows the implementation of specialist care that would have previously required an admission.

Setting up the service

The GPs in Medway PCT opted out of wound care provision in 2006 following discussion with primary care nursing staff. In response, the community tissue viability team established a wound therapy clinic for people with diabetic foot problems who are mobile and, therefore, do not require a home visit. Care ranges from suture removal to tissue biopsies and is accessible to all in the Medway PCT area. The podiatry clinic has established excellent links with the wound therapists spending time in each clinic to ensure clear understanding of each profession. The wound clinic nurses have been able to complete debridement training by spending time with the podiatry team and the same is true for the podiatrists making up hours in practice for supplementary prescribing.

People with diabetic foot problems can be referred between podiatry clinics and wound clinics, and be seen within 24 hours. While the podiatry clinic is open from 9–5 five days a week, the wound clinic supports out-of-hours care allowing those who are mobile or working more flexibility without impacting too much on their daily lives.

Referrals can be made over the phone and are supported by a faxed referral form. Contact and discussion over the individual's management plan is done over the telephone and patient-held records that maintain effective communication. This is essential in order to monitor the individual's progress and initiate recommended changes to the care plan. Understanding one another's role and responsibilities enables the multidisciplinary team to work together efficiently (Boaden and Leaviss, 2000; Stuttle, 2004) and provide

seamless care, ensuring that the people with diabetes have confidence when treated in either clinic.

It is understood that many aspects of diabetes care require a multidisciplinary approach and so a brief overview will follow of some of the treatment options where the podiatry clinic and wound care team (podiatrists, specialist tissue viability nurses and two assistants) work closely.

Treatment options

For those people with diabetes who require admission into hospital or urgent vascular assessment due to deterioration of their foot problem, the wound clinic will refer directly to podiatry on the same day. Links are in place for fast admission, removing the need for the individual to wait in an accident and emergency department, and there is also a fast-track service to the vascular clinic. This provides seamless care for those receiving specialist podiatry input.

Vacuum-assisted closure therapy

Vacuum-assisted closure (VAC) therapy has been shown to be superior to moist dressings in wound healing (Eginton et al, 2003; Armstrong et al, 2005). VAC therapy was introduced for individuals with chronic wounds and, although good quality evidence is limited, small studies have supported its use in the diabetic foot (Eginton et al, 2003; Armstrong et al, 2005). All the wound therapists at the clinic are experienced in the application of VAC therapy so treatment can begin almost immediately. Previously, VAC therapy would need to be organised with the district nurses and this caused delay due to funding issues and knowledge gaps. Podiatry and wound therapy departments liaise to arrange appointments for debridement followed by reapplication of VAC therapy, ensuring a minimal break in treatment.

Larval therapy

The podiatry clinic uses larval therapy to debride wounds unsuitable for sharp debridement and for cleaning the wound to

expose the wound base. Studies by Sherman (2002; 2003) found that larvae were more effective and efficient in debriding ulcers than conventional treatments. Larval therapy is a simple and highly effective method of cleaning infected and necrotic wounds and has become increasingly important in the treatment of wounds infected with resistant strains of bacteria (Bexfield et al, 2004). The benefits of larval therapy have enabled clinicians to effectively treat people who have declined antibiotics or have refused admission for surgical debridement. The wound therapy service can follow up individuals who have had larval application, and monitor wound progress. A fresh application of larvae can be applied at the wound therapy clinic. Owing to good communication channels, larval therapy can be organised by the podiatrist to be delivered at the wound therapy clinic, ensuring that people do not encounter delays in appropriate treatment. Larval therapy has, surprisingly, been welcomed by service users and, as a result, this treatment has been implemented earlier in suitable individuals rather than attempting more conventional treatments.

Intravenous antibiotic therapy

Initiation of intravenous antibiotic therapy at home is available through the podiatry clinic where the consultant physician is available to write the prescription. This is likely to change as the podiatrists now have the benefit of supplementary prescribing. A systematic review of antimicrobials concluded that there was no strong evidence to support any particular antimicrobial regimen for the resolution of infection in the diabetic foot (Nelson et al, 2006). The risk that infection poses in the diabetic foot is well documented, along with the knowledge that ulcers with clinical signs of infection should receive intensive, systemic antibiotics (NICE, 2004).

The podiatry team established a home intravenous antibiotic service provided by the rapid response nurses to treat cellulitis. Based on evidence from Bradsher and Snow (1984), ceftriaxone, a broad-spectrum antibiotic,

was chosen as a suitable intravenous option for administration in the patients' home. The benefit is that ceftriaxone can be given once a day, reducing the impact on nursing time. A local audit by the podiatry team has shown that intravenous ceftriaxone prevented admission and showed improvement or resolution of cellulitis. Of the 20 users who were involved in the audit, 17 showed improvement in cellulitis, 2 were admitted for vascular review due to critical ischaemia and 1 individual had an adverse reaction and treatment was ceased. This service offers individuals an alternative to admission and has been positively received.

Wound therapists review people with diabetes who do not require regular debridement and have directly referred back to podiatry to review individuals who have presented with cellulitis. Those presenting with tracking cellulitis or when oral antibiotics have been unsuccessful have been put on intravenous ceftriaxone. Intensive treatment involving podiatry, wound therapy and rapid response has prevented minor amputation in two cases. The wound therapy team is an important part of the multidisciplinary care in the treatment of the diabetic foot.

Conclusion

The range of treatments available to people with diabetic foot complications is due to effective multidisciplinary working between the podiatrists and community wound care team: the team is currently looking into providing Versajet treatment (this is a hydrosurgery system that uses a high-pressure saline jet to debride, irrigate and remove debris from a wound). Ensuring that all team members spend time within the different clinics enables appropriate referrals between professions and improves shared care as scope of practice is understood. Our shared patients have all been pleased with the care they receive at both clinics, and they benefit from continued review and second opinions that can only occur within a multidisciplinary team. ■

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