The patient was a 38-year-old woman who was an intravenous drug user and had tested positive for both hepatitis C and human immunodeficiency virus (HIV). She had collapsed at home following an overdose sustaining a cerebral bleed and extensive burns to her shoulder and upper back from a radiator. She was admitted to the neurosurgical high dependency unit.

The patient was assessed by the plastic surgeons and prescribed topical silver sulfadiazine and tulle dressings daily. In view of her co-morbidities no sharp debridement was attempted in the high dependency unit. The wounds became colonised with methicillin-resistant Staphylococcus aureus and the plastic surgeon referred the patient to the tissue viability nurse for ongoing wound management.

At presentation the wound dimensions were 26x15cm and 6x6cm (Figure 1). The larger wound was approximately 40% necrosis and 10% slough and the remainder of the wound bed was dusky. The smaller wound was 60% sloughy tissue. There were high levels of exudeate and malodour and although the patient was ventilated she was able to indicate that the wound was painful. The peri-wound skin was healthy in appearance.

The wounds were dressed with Suprasorb X+PHMB (Figure 2) (Activa Healthcare, Burton-upon-Trent) and a secondary foam dressing. This regimen was chosen to promote autolytic debridement while reducing the wound bioburden in a safe and controlled manner. In view of the patient’s co-morbidities, consideration was also given to cross-contamination. Britain® adhesive foam secondary dressing (Coloplast, Peterborough) was chosen to provide a high level of absorption during autolytic debridement and subsequent high volumes of exudate. The combined dressings controlled exudate for 48 hours and protected the peri-wound skin from its destructive effects. The dressing was changed on alternate days.

After 48 hours there was a significant improvement to the wounds. A large area of necrosis had debridged and the wound bed appeared healthier (the larger wound consisted of 40% slough, with no necrosis and improved vascularity to the wound bed, while the smaller wound was covered with approximately 30% surface slough). There was less malodour and the peri-wound skin was healthy despite high exudate levels (Figure 3).

At the third dressing change there was no malodour and the wounds continued to debride. There was now evidence of epithelialisation at the wound margins and wound cultures showed no significant growth (Figure 4).

The wounds were swabbed on 2 March (after six days of treatment), and the patient was able to move into the main ward area because she no longer considered a risk to other patients in terms of cross-contamination (the wound was to be swabbed weekly). This move proved to be a turning point in her recovery because, as the patient had suffered a cerebral bleed and sustained neurological deficit, it was vitally important that she be nursed in a stimulating environment with more social interaction than could be achieved in an isolated area.

After four weeks of treatment the wounds had made significant progress and its dimensions were 15x7cm and 3x3cm, respectively (Figure 5). There was no significant bacterial growth, no malodour and there had been a good progression towards healing (80% healthy granulation tissue, 10% superficial slough).

This regimen was particularly successful because rapid and safe wound debridement was achieved while managing wound pathogens and preventing cross-contamination to other vulnerable patients. Following stabilisation of the wounds, the patient was able to participate more actively in a rehabilitation programme which facilitated transfer out of secondary care to a rehabilitation unit for ongoing care in a timely manner.

The nurses in the rehabilitation unit were able to manage the wounds effectively and no further TVN support was necessary.