and while it reduces some of the serious risks involved in intravenous drug use (such as endocarditis and overdose), it carries a significant risk of abscesses and cellulitis.

For drug users, ‘skin-popping’ is an easier technique to apply but fails to provide the initial ‘rush’ delivered by IV injection. However, the effects of the heroin when taken subcutaneously are longer-lasting and will therefore be more effective at preventing withdrawal symptoms later on.

Paul had been using heroin for about a year and had never injected himself intravenously due to difficulties accessing veins, but had allowed others to do so for him.

**INITIAL TREATMENT AND PROGRESS**

Wound care was started with a protease modulator dressing, Aquacel, to absorb exudate and promote granulation, covered with padding and a light bandage, and was changed twice weekly. The SIAHS nurse coordinator gave Paul a prescription for the wound care products and for Ensure Plus supplement drinks to aid nutrition and wound healing. He was also given advice on how to improve his diet.

Photographs and measurements were taken weekly to monitor the wound’s progress. Within one week (day 8), the entire wound had filled with granulation tissue but had progressed further to overgranulation (Fig 2).

Aquacel was continued and Paul was referred to the local PCT’s community tissue viability nurse (TVN) for further advice. The TVN saw Paul at the day-centre clinic and recommended Acticoat Moisture Control to reduce the excess granulation tissue, which the nurse coordinator prescribed and then initiated the following day (day 16).

**Overgranulation**

The terms ‘overgranulation’ and ‘hypergranulation’ tend to be used interchangeably, but ‘overgranulation’ is the preferred term for this excess granulation tissue, since it is caused by saturation of interstitial tissue with oedematous fluid that has leaked from immature capillaries in fast-growing granulation tissue (Hampton, 2007; Vandeputte and Hoekstra, 2006).

Overgranulation tissue may indicate infection and is commonly associated with highly exuding wounds, particularly those with occlusive dressings (Banks et al, 1999, cited by Hampton, 2007). This is thought to be due to the dressing becoming saturated as a result of excessive wound exudate, leading to insufficient drainage of the wound environment and consequently increasing oedema in the tissues. Discontinuation of occlusive dressings in favour of a less occlusive regimen can be an effective method of reducing this saturation, thereby decreasing the overgranulation (Vandeputte and Hoekstra, 2006).

**Rationale for choice of dressing**

Because overgranulation tissue is raised above the surface of the surrounding skin, epithelial tissue is unable to migrate across the wound surface, delaying wound healing (Vandeputte and Hoekstra, 2006).

The oedema associated with overgranulation can be reduced mechanically by light pressure, achieved by applying a vapour-permeable foam dressing and a supplementary bandage (Young, 1995; Harris and Rolstad, 1994). Treatment with an antimicrobial agent can further reduce excess granulation as this unhealthy tissue is often associated with infection or bacterial colonisation (Hampton, 2007).

Acticoat MC combines vapour-permeable, polyurethane foam with the antimicrobial properties of nanocrystalline silver. Although there is no robust published evidence base yet for this relatively new dressing, some promising studies have been published, such as Thomas (2007), which demonstrated the effective use of Acticoat MC for a previously non-healing diabetic foot ulcer.

In the case of Paul’s wound, which showed no direct evidence of infection, the choice of Acticoat MC over a less expensive foam dressing without silver was guided by the aim to prevent infection and by practitioner experience.

White et al (2001) observed that chronic wounds are inevitably colonised with a mixture of potential pathogens, increasing susceptibility to infection. They also asserted that infection is one of the most significant factors to delay healing.

The TVN’s previous experience confirmed the effective use of Acticoat MC for reducing overgranulation and preventing infection, and while it reduces some of the serious risks involved in intravenous drug use (such as endocarditis and overdose), it carries a significant risk of abscesses and cellulitis.

With use of the Acticoat MC dressing, Paul’s wound showed no evidence of infection on day 16 and Paul demonstrated improvement in his diet.

**Photographs and measurements were taken weekly to monitor the wound’s progress.**

### Photographs

**Fig 2.** The wound on day 8 – now overgranulating

**Fig 3.** Day 33 of treatment