# Maggots in the management of ulcer care

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## **DESCRIPTION**

An elderly man was admitted to the hospital with right leg mixed aetiology ulcers and superadded cellulitis, which had been unresponsive to several weeks of oral



**Figure 1** Image showing right leg mixed aetiology ulcers and superadded cellulitis.



**Figure 2** Image showing right leg postsurgical debridement therapy.



**Figure 3** Image showing right leg postbiological maggot debridement therapy.



**Figure 4** Image showing right leg wound healing prior to discharge.

antibiotic therapy (figure 1). He was an ex-smoker with a medical history of hypertension, atrial fibrillation and previous cerebrovascular event and was treated with intravenous antibiotics for superadded infection. Surgical debridement was undertaken with little success (figure 2). He was offered biological debridement therapy using contained maggots, to which he responded very well and was discharged home after 1 month. (figures 3 and 4)

Biological debridement uses Green Bottle fly (*Lucilia sericata*) larvae (figure 5) to remove necrotic tissue and bacteria via proteolytic enzyme secretions. They can be applied free-range or contained. Although there is limited evidence for its use, studies have found the therapy to be safer, quicker and more effective than other debridement



**Figure 5** Image of larvae used in biological maggot therapy debridement



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# Images in...

## **Learning points**

- Biological debridement is a safe and cost-effective debridement method.
- Clinicians are reminded that biological ulcer debridement is an effective option.
- Biological debridement, maggot therapy, should be considered in ulcer care management.

methods.<sup>1</sup> It has lower amputation rates and faster time for complete debridement when compared with conventional therapies, including hydrogels and/or surgery.<sup>2</sup> One study found maggot therapy was cheaper, resulted in shorter hospital admissions and faster wound healing, leading to an estimated saving of £50 million per annum.<sup>3</sup> Research in biological debridement maggot therapy is limited; however, clinical experience suggests that it is an effective option for debridement and should be considered in the management of ulcer care.<sup>4</sup>

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