Maggot therapy similar to standard care for leg ulcers

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Larval (maggot) therapy has similar health benefits and costs compared with a standard treatment for leg ulcers, find two studies published on bmj.com today.

Leg ulcers are chronic wounds most commonly caused by diseased veins in the legs. Debridement (the removal of dead tissue from the ulcer surface) is a common part of ulcer management and is widely viewed as having a role in promoting wound healing.

Debridement can be undertaken with a hydrogel, but it has been suggested that larval therapy debrides wounds more swiftly, as well as stimulating healing and reducing infection.

A team of UK researchers have carried out the first randomised controlled trial to investigate the clinical and cost-effectiveness of larval therapy on wound healing.

The trial involved 267 participants who had at least one venous or mixed venous/arterial leg ulcer with dead tissue (sloughy and/or necrotic tissue) covering at least a quarter of the wound.

Participants were randomised to receive loose larvae, bagged larvae or hydrogel during the debridement phase, followed by standard treatment. People were monitored for up to 12 months, during which time the date of complete healing of the ulcer was recorded by trained nurses.

Date of debridement was also recorded, as were bacterial levels, adverse events and ulcer-related pain. Participants completed a health-related quality of life questionnaire at the start of the study, and then again at three, six, nine and 12 months.

Larval therapy significantly reduced the time to debridement compared with hydrogel, but there was no evidence of a difference in time to ulcer healing (half of patients allocated to the larvae group were healed by 236 days compared with 245 days for the hydrogel group).

There was no difference between larvae and hydrogel groups in health-related quality of life or in bacterial load (including MRSA). Larval therapy was associated with twice as much pain in the 24 hours prior to removal of the first application compared with hydrogel.

The authors conclude that, although larval therapy is a more effective debriding agent than hydrogel, there is no evidence from this trial that it should be recommended for routine use on sloughy leg ulcers with the aim of speeding healing or reducing bacterial load. They suggest that further research is required to explore the relationship between wound debridement, healing and microbiology, and to better understand the value of debridement from the patient perspective.

In a separate analysis, the researchers calculate that larval therapy is likely to have similar cost-effectiveness to hydrogel. As such, they conclude that healthcare decision makers should generally be indifferent when recommending these two therapies for the debridement of sloughy leg ulcers.

Source: British Medical Journal (news : web)