

Sterile Biobag Maggots (larvae) in the cleaning of wounds

Introduction

This leaflet provides information for patients who have an open wound (not closed with stitches) that needs cleaning to allow it to heal.

Larval therapy and biosurgical debridement are 2 other terms that we use to describe the cleaning of wounds using sterile maggots.

This is not a new idea; maggots have been applied to wounds in order to clean them since the American Civil War until the introduction of antibiotics. Since the 1980's maggot therapy has become supported again for treating mucky or dirty wounds, as it is recognised that overuse of antibiotics can lead to the increase of resistant bacteria and infection.

How do the maggots work?

The contents of a fly's egg are sterile although the outer surface is heavily contaminated with bacteria. Sterilising the outer surface of the fly eggs and then allowing them to hatch in a sterile environment produces sterile (clean) maggots.

Maggots are living chemical factories that move over the surface of the wound. As they do so they secrete a powerful enzyme that breaks down dead tissue. The maggots eat the dead tissue. Any bacteria or microorganisms in the wound will also be eaten by the maggots or killed by the enzymes that they secrete.

The maggots will not eat or burrow into healthy tissue and they will not lay eggs or turn into flies while in your wound.

The maggots will only be left in your wound for 4 days.

What do the maggots look like?

Maggots used to clean are smaller than an uncooked grain of rice.

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Patient Information

The maggots will be in a net pouch where they remain sealed in the dressing throughout the treatment.

When they are removed after 4 days the maggots will be about the size of a cooked grain of rice. Please don't look at them if you don't want to.

Can the maggots escape from the wound?

The maggots will be held in the wound by a specially designed dressing system. This will be checked regularly to make sure that it is stuck down well. There is little chance for the maggots escaping.

Will the maggots smell?

It is quite normal for you to find an increase in the smell or amount of fluid coming from your wound as the maggots break down the dead tissue. The outer dressing will be changed regularly to help reduce this.

The outer layer of the dressing system can be changed without disturbing all of it, so if the outer dressing becomes wet your nurses can change it for you.

Having maggots in your wound should not alter your day-to-day routine and activities. However you should not take a bath or shower as this can make the dressing too wet and kill the maggots. Also try not to get the wound too hot, as this may cause the maggots to dry out and die.

When are maggots used?

Sterile maggots are only placed in open wounds that are infected or contain sloughy (dirty) or necrotic (dead) tissue. They can be used in many different types of wound including leg ulcers, pressure sores, burns, abscesses and infected surgical wounds. Please be confident that the wound is carefully assessed before maggots are used.

**Patient
Information**

Alternative treatment

There are other ways of cleaning wounds, these include:

- 'Sharp' debridement - using a scalpel (sharp blade to remove dead tissue). This treatment may mean going to the operating theatre and it can be quite sore afterwards
- Wound dressings - some dressings are often costly and slow to act. You may have tried them before being offered maggot therapy

If you really do not like the idea of maggot therapy discuss it with your doctor and the nurses who are trained to apply them. After the discussion if you still do not like the idea of having maggots on your wound you can refuse the treatment. We will then continue with your usual dressings.

Reminder

- The dressing consists of sterile fly larvae or maggots
- Maggots are not harmful
- Maggots will clean your wound by removing dead tissue
- They will not burrow into or eat healthy skin. They will not lay eggs or turn into flies in your wound
- It is unlikely that you will feel them moving in your wound
- It is quite normal to find an increase in the smell or amount of fluid coming from the wound. Do not worry about this
- Do not take a bath or shower while the maggots are in the wound, as this would make the dressing too wet and might kill the maggots
- Try not to get the wound too hot, for example sitting too close to the fire or radiator, as this may cause the maggots to dry out and die

Contact information

If you experience any problems which you think may be due to the maggots, please contact the nurse who applied them.

If you have any other concerns or questions about maggot treatment please discuss these with your doctor or the nurse who applied them to your wound.

**Patient
Information**

Further information

The Bio Surgical Research Unit has a good website which gives useful information on maggot therapy and case studies of maggots in use, including pictures:

BioMonde

Website: www.biomonde.com

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