

# About epidermal harvesting

## Information for patients

This leaflet answers common questions about epidermal harvesting (EH). If you would like further information, or have any particular worries, please do not hesitate to ask your wound care specialist or doctor.

In all cases, they will explain the procedure to you and answer any questions you may have.

In most cases it will be possible for a friend or relative to accompany you for all or part of the procedure. Please ask your doctor or wound care specialist.

### What is epidermal harvesting (EH)?

Epidermal harvesting is a procedure used to promote wound healing in hard to heal wounds. The epidermis (the very thin protective top layer of your skin) is removed from the inner thigh of the leg and transplanted directly onto a wound.

A 'CelluTome™ Epidermal Harvesting System' is used to carry this out (see figure1). The system uses a sterile, disposable 'harvester' and a 'vacuum' to produce tiny blisters (a graft) on the epidermal layer of the skin (see figure 2). The blisters are carefully removed from the thigh with the help of a small silicone dressing and then transplanted to the wound site.

**Figure 1. Cellutome™ Epidermal Harvesting System**



**Figure 2. Image of tiny blisters produced by harvester and vacuum device**



### **Why do I need EH?**

You may need EH if your wound is not healing as expected and is not suitable for surgical wound closure.

### **What are the benefits of EH?**

EH promotes wound healing in hard to heal wounds. It is a treatment option your doctor may advise when surgery to close the wound is not suitable or when your wound is not healing with dressings alone.

### **Who can carry out the procedure?**

EH can only be carried out by a registered healthcare professional that is skilled in this procedure. They will have completed CelluTome™ EH training and related competencies recognised by a local health provider.

### **How is the procedure carried out?**

Your wound care specialist will assess your wound during your plastic surgery out-patient appointment and provide you with information about epidermal harvesting.

Before the procedure is performed we will ask you to sign a consent form. We want to involve you in decisions about your care and treatment. Your specialist will explain the procedure to you, along with the associated risks, benefits and alternatives. If you have any questions or any concerns, please do not hesitate to ask for more information.

You will be given a gown to put on and helped onto the treatment couch. EH can be performed while you are sitting or lying down. The procedure will be carried in several steps:

1. First, your wound and the inner part of your thigh will both be thoroughly cleaned.
2. The 'harvester' will then be strapped (not too tightly) to the inner part of your thigh to ensure contact with the skin, and the 'vacuum head' will then be clipped securely onto the harvester. A new, sterile harvester is used for each patient.
3. Typically, your specialist will set the CelluTome™ system to 30-45 minutes, but this will be assessed on a patient-by-patient basis. During this time the harvester will heat the skin – this should not be painful. If you do feel any discomfort, please tell your wound care specialist. Your specialist will check that micro-blisters have formed on the skin, and will let you know when these are ready to transplant onto your wound.

4. When ready, the 'Cellutome™ Epidermal Harvesting System' will be turned off and the vacuum head will be unclipped (released) from the harvester.
5. Your specialist will apply a small silicone dressing to the harvester, and will ensure the micro-blisters stick to the dressing before releasing the harvester. You will hear a click as the harvester is released. You may experience a little discomfort but this will not last long.
6. Finally, your specialist will transplant the micro-blisters (graft) onto your original wound and cover it with a dressing. The donor site on your thigh will be protected with a simple film dressing.

### **Is it safe? Are there any side effects or risks?**

EH is safely performed in an out-patient environment. There are no known side effects. The harvester is sterile and is only used once, so the risk of injury, bleeding, contamination and infection is minimised.

### **Will it work?**

EH is one treatment option used to promote wound healing. It may take several weeks for new skin cells from the micro-blisters to form and spread across the wound. This process may not initially be visible to the naked eye, but as the wound heals it will appear to decrease in size before complete wound closure is achieved. This technique has around a 70% success rate.

### **Will I need an anaesthetic or an operation?**

You will not need an anaesthetic or an operation to have EH. EH is performed as an out-patient procedure. It may take up to 60 minutes from start time to completion. If your wound is large or complex, you may require another session of EH at a later date. In all cases, your wound care specialist will advise you.

### **What happens after this type of treatment?**

After EH, you will be given a follow-up appointment to be seen within the first week after your procedure. By this time the wound to your thigh (the donor site) should have healed. Your wound care specialist will assess your original wound where the micro-blisters were transplanted.

From then on you may require dressings once or twice a week until your wound has healed. If you are able and happy to, your specialist will teach you how to dress the wound so you are able to do this yourself between your follow-up appointments in the plastic surgery out-patient clinic. Alternatively, if

you need extra support from a district nurse or practice nurse, your wound care specialist will arrange this.

### **Will I have a scar?**

The donor site does not usually leave a scar. However, your original wound will heal to leave a scar – this is part of the body's normal healing process. Your wound care specialist will advise you on how to best manage your scar once your wound has completely healed.

### **Contact details**

If you have any concerns or questions, please contact the plastic surgery outpatient clinic on 020 7794 0500 ext 31312.

### **Further information**

For more information about the 'CelluTome™ Epidermal Harvesting System' please visit: [www.acelity.com/products/cellutome-epidermal-harvesting-system#tab\\_1](http://www.acelity.com/products/cellutome-epidermal-harvesting-system#tab_1)

For information about the plastic and reconstructive surgery department at the Royal Free London, visit our website at:

[www.royalfree.nhs.uk/services/services-a-z/plastic-surgery/](http://www.royalfree.nhs.uk/services/services-a-z/plastic-surgery/)

If you require a full list of references for this leaflet please email: [rf.communications@nhs.net](mailto:rf.communications@nhs.net).

**This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.**

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