

Having surgery to aid healing of a complex wound by using an artificial skin product

Department of Plastic Surgery

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Information for Patients

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What is biodegradable temporising matrix (BTM)?

BTM is a synthetic skin substitute (artificial skin). It can be used in wounds where there has been a loss of the deeper layers of the skin (the dermis) to help new tissue grow (integrate). The BTM acts as a support for blood vessels and new skin tissue.

There are often 2 stages in the process to repair a wound with BTM. Once the BTM has achieved its goal of becoming part of the wound, another operation may be needed to remove the top layer of the BTM and then a skin graft would be applied on top (please ask your nurse/doctor for the leaflet 478 'Care for your skin graft and donor site' for information about this). In some cases the surgeon may feel that your wound will heal on its own with dressings after the use of BTM but this will be discussed with you.

What type of wounds is it used on?

BTM is used on deep wounds which have broken all layers of skin, where the bone or tendons may possibly be exposed (full thickness wounds). This wound may have been as a result from trauma or surgery. It can be used on a variety of places on the body.

What is it made from?

BTM is made from a biodegradable polyurethane foam covered by a non-biodegradable layer on top. BTM contains no products from animals.

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How is the BTM attached to the wound?

You will have an operation under an anaesthetic to place the BTM. The surgeon will talk to you about a plan as to how this will be done. They will see whether it is best done under a local or general anaesthetic. A number of factors will be used to decide this. If you are having a general anaesthetic (GA) information can be given to you to tell you about fasting etc (please ask your nurse/doctor for leaflet 870 'Having a general anaesthetic - instructions to follow before and after your operation').

The length of time the operation takes varies from patient to patient.

Either stitches or staples will be used to fix the BTM to your wound, this decision depends on where it is being used on the body.

How long will I be in hospital?

Whether you can go home on the day of your operation or need to stay in hospital will depend on the location and size of where your BTM is. Going home can also depend on how you are feeling following your anaesthetic, for example, if you feel sick or are being sick, are in a lot of pain, or whether you are eating and drinking and able to wee normally.

How do I take care of the wound?

Depending on where your BTM is on your body, particularly if in mobile areas, your movement may need to be restricted. For example, if on the foot or arm you may need to be in a cast until there are signs that the BTM has started to become part of your wound. If you do have a cast on ask your nurse/doctor for leaflet 860 'Looking after your cast after a skin graft or plastic surgery'.

In some cases, a VAC (vacuum assisted closure) machine may be used to help the integration of the BTM. Instructions will be given on how to look after your dressing and the machine attached will be given before your discharge.

It is advised that you raise areas such as arms and legs to prevent any swelling which may occur.

Dressings need to be kept clean and dry to prevent risk of infection. You may need to think about your daily hygiene routine and adapt around the dressing.

How long is it left in place?

The outer layer of the BTM may be left on your wound for anywhere in between 3 to 8 weeks until removal, this depends on how quick the deep foam (matrix) part integrates to your wound. Your nurse/doctor will update you about the progress of this throughout your hospital visits.

Your follow-up appointments

You may need to come for weekly visits to our Burns and Plastics Dressing Clinic (BPDC). This is for an overall check on how the BTM is progressing. We will check for any complications, for example, any signs of infection or fluid collection, which can reduce the effectiveness of the BTM. To reduce the risk of this happening, special dressings containing antimicrobials will be used on top of the BTM. The dressing will need changing at least 2 times week. If you are not coming to BPDC then this will need to be done by either your practice nurse (county patients) or district nurses (city patients). District nurses can be contacted on the Single Point of Access line 0300 300 7777.

You may also need to see a physiotherapist about moving the area or occupational therapist about scar therapy. On visiting BPDC your nurse will discuss these with you and whether you need referrals to these services.

Are there any side effects or risks?

With any operation where there is a wound involved there is a chance of infection. This is why special silver dressings are used to help keep the area clean. See the last page for signs of infection.

There is a chance that a fluid or blood collection can occur under the BTM, this chance is lowered by sometimes putting small cuts in the top of the BTM allowing fluid to come out from underneath.

There is a small chance of developing a localised allergic reaction to the BTM, if this happens then it would need to be removed by surgeons urgently.

Is there an alternative?

There are other skin products that can be used, however BTM is the chosen product at this trust and other local trusts, please discuss with your surgeon if you wish to know other alternatives.

What are the benefits of using this product?

Research shows that patients with BTM have a better results with regards to movement and appearance/ feel of the scar than compared to normal skin grafting or healing just by dressings.

BTM helps to heal complex wounds at a faster pace than just with normal dressing regimes so there is less chance of skin becoming tight which affects movement (scar contractures).

BTM can be used by those with different cultural beliefs or food preferences as no animal product is used.

Looking out for the signs of an infection after surgery

On your dressing changes your nurse will assess your BTM for any signs of an infection. These symptoms include:

- redness around the area
- swelling
- warm to the touch
- pus coming from the area
- an increase in pain in that area
- feeling feverish

Contact details

Burns and Plastics Dressing Clinic: 0116 258 5328

Ward 9: 0116 258 5375

Kinmonth Unit: 0116 258 5327

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على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

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