INTEGRA® Dermal Regeneration Template

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What is INTEGRA®?

INTEGRA® is a two layer sheet which is placed on to the wound bed to act as a skin replacement. It is made from tendons from cows and shark cartilage. The bottom layer, which attaches to your wound, acts as a support for blood vessels and new skin tissue to grow into, so in time, your body gradually replaces this layer. When your body has partially absorbed the INTEGRA®, the silicon top layer is then removed and replaced by a skin graft. A skin graft is a thin layer of healthy skin which is taken from another area of your body and then placed over the INTEGRA® site. The area where the skin is taken from is called a donor site.

Why do I need dermal regeneration template INTEGRA®?

1. **INTEGRA® for treatment of a scar contracture**

INTEGRA® has been recommended to you for treatment of a scar contracture. A scar contracture is the shortening and thickening of skin and muscle often as a result of a previous burn injury. Scar contractures can restrict movement, so to treat this problem the scar tissue has to be surgically removed and replaced with a piece of healthy skin.

2. **INTEGRA® for treatment of a large deep burn**

The treatment of a deep burn usually requires a skin graft. When you have a large burn, there is not always enough healthy skin which can be used to cover the burn. When this is the case INTEGRA® is sometimes used as a skin substitute. INTEGRA® closes the burn wound stopping fluid loss and helps prevent infection. It allows time for some of the burns to heal so the newly healed skin can be used for donor sites.
3. INTEGRA® for reconstruction

INTEGRA® has been recommended to you, to help in the reconstruction of your wound. INTEGRA® may be used to make a wound bed graftable. It’s application will help to establish the ideal skin graft bed. INTEGRA® will also help to stabilise a graft in a region exposed to wear and tear.

What is the INTEGRA® application procedure?

INTEGRA® application is a two stage procedure involving two operations.

First stage: The application of the INTEGRA® to the burn wound or skin contracture. This has to be done in an operating theatre or area for reconstruction under an anaesthetic. The silicon layer remains in place for at least 21-28 days

Second stage: A second operation is needed to remove the top silicon layer and have a skin graft put in its place.

Why does it take two operations?

The INTEGRA® sheet needs time to attach itself to your body. It will slowly be absorbed into your body and replaced by your own tissue that will grow into it. This takes at least three weeks. During this time you will have dressings covering the INTEGRA®. The first dressing change is usually 5 days post your surgery either as an inpatient or in the Hospital at Home/Plastics Outreach Clinic as an outpatient. These dressings will normally require twice weekly changes by a Specialist Nurse. After 21-28 days you will have the silicon layer removed and a skin graft applied.
What are the benefits of INTEGRA®?

- Compared to other skin replacements available it acts as a more natural skin.
- When new skin has grown with the use of INTEGRA®, the new skin is soft and pliable and grows with you as normal undamaged skin does.
- INTEGRA® allows immediate wound cover, acting as a substitute ‘skin’ layer, preventing fluid loss and is as a barrier to infection. It also gives any burned skin in another area of the body time to heal so that it can be used as donor sites in the future.

What are the complications of INTEGRA®?

The INTEGRA® or skin graft may fail to stick to your body for a various reasons, such as infection.

If you notice any of the following signs listed below, please contact a member of the burns or plastic team for advice:

- Smelly discharge form the dressing
- High temperature
- Increased pain
- Redness or swelling around the INTEGRA® area or donor site
- Bleeding through the dressing caused by trauma or infection
- Seroma – fluid collection under the silicone layer
- Haematoma – blood clot under the silicone layer
- Early separation of the silicone layer

Trauma to the affected area may also cause the INTEGRA® or graft not to stick to your body. To help prevent any trauma you will have padded dressings over the area and in some cases you may be required to wear a splint to stop movement to the area where the INTEGRA® or graft has been applied.
Caring for the INTEGRA®
After having INTEGRA® first stage and the skin graft second stage it is important to care for the wound area.

• Keep it clean to avoid infection

• Avoid stretching or moving the area that has had the INTEGRA® treatment, unless told otherwise by medical staff or therapist

• The area will have a firm dressing in place to stop any friction or movement

• The pressure of the dressing will stop fluid collecting under the INTEGRA® and the skin graft

• The dressing is usually left in place for 3-7 days and will then be looked at by a doctor or nurse

• It is important to follow the advice given to you by any of the specialist team

What will the area look like after it has had a skin graft applied to the INTEGRA®?
At first the graft will look a different colour to the rest of the skin, usually dark reddish purple. This may take 18 months to 2 years to fade and become paler. Sometimes it takes longer and the area may never be exactly the colour as the undamaged skin. The area may not feel as smooth as the rest of the undamaged skin, but given time this may improve. It will never be exactly the same as before the area was injured.

When the doctors are happy with the wounds you will be able to go home. You will have to come back to the hospital for the dressings to be changed and the INTEGRA® and skin graft to be checked. It is important that you keep your appointments.
Donor sites/areas

As mentioned before a donor site wound will be created for the second stage of the procedure; the skin graft. The common areas used as a donor site are the buttocks, thighs and upper arms, depending on healthy skin available.

The donor site will be dressed in theatre and the dressing will be left in place for 7-10 days, depending on the type of dressing. The donor site area is usually more painful than the grafted INTEGRA® area as the top layers of the skin are removed exposing the nerve endings. Regular pain killers will need to be given to ease the discomfort. It is advisable that you take regular pain killers at home, as prescribed and prior to a dressing change. Nursing staff will advise you how to look after your donor site dressing.

After care of the grafted INTEGRA® and donor sites

The wounds will probably itch, but this will lessen with time. Try to avoid scratching the area as this may damage the new skin. Anti-histamine medication can be used temporarily to relieve the ‘itch’.

When the wounds have healed, you will need to apply cream on to them, gently massaging them 2-3 times a day to prevent them getting dry and flaky. The nursing and medical staff will tell you when to start putting cream on and what type to use.

The INTEGRA® grafted area and donor site and any other wounds will need to be protected from the sun as they will burn more easily than your undamaged skin. Sun block needs to be used on these areas and the area covered with clothing. Use at least factor 40.

You may be referred to our therapy team for on going scar management and assessment for pressure garments which are
used to flatten and smooth scars. The surgical team will advise you when you can return to work.

**Are there any other treatments I can have?**

There may be other treatment options available to you, these will be discussed with you by your consultant.

**What will I be able to do at home?**

When the INTEGRA® skin graft has healed properly you should be able to carry on with your normal day to day activities. If we or you have any concerns with you returning to everyday activity, we will refer you to our therapy team.

If you feel you need more information or have any concerns about your treatment or wounds, please speak to a member of the burns or plastics team. They will be happy to explain further.

**Further information**

For further advice you can contact the team during working hours Monday to Friday 8-4pm.

Burns and Plastics Outreach/Hospital at Home  
**0121 371 5462.**

Out of normal working hours, please contact Burns and Plastics on call doctor via switchboard on  
**0121 627 2000.**
The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit www.uhb.nhs.uk or call 0121 627 7803

Burns and Plastics
Queen Elizabeth Hospital Birmingham
Mindelsohn way, Edgbaston
Birmingham, B15 2GW
Telephone 0121 627 2000