

## Wound Wisdom

Newsletter of the  
South Australian Wound Management Association Inc.

October 2010  
Issue No. 73



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[www.sawma.org.au](http://www.sawma.org.au)

# Education Evening

Wednesday 24 November 2010

## The Butterfly Effect

### Managing Epidermolysis Bullosa and Eczema

An education evening featuring presentations from EB specialist

**Ms Louise Stevens** and nursing specialist **Ms Pam Hudson**

**Special Pre-presentation discussion hosted by AWMA President  
Mr Bill McGuiness**

Trade Display & Supper 1845

Supper Kindly Sponsored by:



Education Evening Commences @ 1930

All Welcome

**Non members \$5.00 Members & students free**

*SAWMA is a multidisciplinary association and is  
non-partisan in its approach to wound products*

**Education Night Venue:  
Julia Farr Association**

**104 Greenhill Road, Unley SA**  
Parking available adjacent building  
(on Greenhill Road)

**Please Note  
Once-off  
Venue  
Change**

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### Campaign for access to subsidised dressing products

Sign the petition at  
[www.elephantintheroom.com.au](http://www.elephantintheroom.com.au)

to support subsidisation of  
dressing products across Australia  
in all care settings. Don't be an  
elephant and ignore the problem.  
SAWMA strongly encourages its  
members to sign.

Encourage your colleagues and  
patients to sign too!

## President's Report

October already! Another year is flying by and SAWMA is about to hold its last Education Evening for 2010.

I am very pleased to announce three important speakers: **Louise Stevens** will discuss Epidermolysis Bullosa (EB) and **Pam Hudson** will talk about eczema. SAWMA is very proud to be partnering with **DEBRA** for the November Education Evening. Louise Stevens is a leading nurse specialist in EB. Louise will present an overview of this devastating condition and discuss the government funded scheme to support funding of dressing products for persons with EB. Even if you do not currently manage persons with EB this session will build on your wound management knowledge and provide information that could be applied to other wound aetiologies.

Additionally, **Bill McGuinness**, AWMA President will present an overview of the planned AWMA Structure Review which will have considerable impact on SAWMA (and all state and territory associations). It will also provide you will an opportunity to comment on the proposed changes to AWMA and SAWMA. Come along and have a say in the future of your association.

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*“Even if you do not currently manage persons with EB this session will build on your wound management knowledge and provide information that could be applied to other wound aetiologies”*

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As this is our Christmas celebration I invite you to join SAWMA for supper, a drink and the opportunity to win one of our raffle prizes. This is one small way SAWMA thanks its members for their support throughout the year. I recommend this Education Evening to all SAWMA members as it will provide new information and knowledge (and of course contributes to your CPD points). A 'not to be missed' event!

Please note that due to speaker availability we have had to move the Education Evening to **Wednesday 24 November 2010**, Julia Farr 'Our Space' seminar facilities, 104 Greenhill Road, Unley. (The ANMF Training and Skills Centre is unavailable on 24 November). This is a once off change to date and venue. SAWMA apologies for any inconvenience this might cause.



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The August Education Evening 'Plastic Fantastic' was well attended and provided information on the techniques and management of skin grafts and flaps. SAWMA thanks our speakers: Alexandra Turner and Helen Fuss for volunteering their time to share their knowledge and experiences.

SAWMA will be holding a one day seminar in 2011. Preliminary planning and programming is commencing and there will be more information in the next newsletter and on the website shortly. I hope you can attend this important event.

All members should have received their copy of the AWMA Standards for Wound Management 2nd Edition with their August edition of Wound Practice and Research. This is an expanded and revised version of the Standards. Please take the time to familiarise yourself with the Standards as these provide the underpinning principles for management of all wounds. The Standards provide a foundation for the review and development of wound practice, policies and tools for practitioners and service providers across all health care sectors. Extra copies can be ordered from the AWMA website [www.awma.com.au](http://www.awma.com.au). A pdf version will be available to download in the near future. A compendium to the Standards will be released soon. This will provide practitioners and service providers with additional information related to wound dressings and therapies, tools and systems. Again, this will be available on the AWMA website.

Finally, a very big **THANK YOU** to everyone for their support in 2010! The members, the Trade and the committee are all vital to continuing the important work of SAWMA in promoting best practice in wound management. I hope you will continue your partnership with SAWMA in 2011.

Very best wishes to everyone for a safe and happy Christmas and New Year.

Happy Wound Management!



Ms Sue Templeton  
SAWMA President



## Education Article: Leech Therapy

By Lindsey Brooks, CN/STN

### Leeches Suck!

Leech therapy is an ancient practice. Physicians for the purpose of bloodletting have used the medicinal leech throughout history.

The first reported use of leeches goes back to a wall painting in a tomb in Egypt, which is dated (1567-1300BC) and depicts the leech being applied by a Berber surgeon.

Today leeching is an important adjunct therapy to plastic and reconstructive surgical procedures. With specific properties contained in their saliva leeching is invaluable for the reduction of venous congestion following surgery.

Research has shown that leeches are most effective in unclogging small veins. The real value of leech therapy is in the special properties of the leech's bite, which contains a naturally produced anti coagulant, a local vasodilator and a local anaesthetic. It also secretes the anti-coagulant hirudin, which is contained in its saliva, and this allows the bite to continue oozing for up to 10 hours.

Many patients are apprehensive at the thought of leech therapy and it is important for them to know how they work and be reassured that they will be closely monitored when in use.

(A patient will be nursed 1 on 1).

Although leeches are not sterile, they should be handled using aseptic technique. The area to be treated should be cleaned with sterile water. This is to remove any traces of saline, as leeches will not suck.

The surrounding area to be leeches will be protected, for example with paraffin gauze this will prevent the leech wandering. The leech

will be lifted gently from the container and placed on

a gauze square. The leech is often "steered" to the desired area, using forceps or a cotton bud. Attachment is usually quick, a needle prick can be made to encourage if the leech is reluctant. Once attached, a leech will remain fairly still until engorged, at which time it will detach spontaneously. The leech is then destroyed as they are deemed a blood product. They are placed in a specimen jar with chlorhexidine or alcohol.

Leeches can only be used if the arterial supply is adequate. They will not attach to an ischaemic area or where the venous congestion is too advanced. Leech therapy can continue for a number days. The cost of one leech is \$45. (As per IMVS Adelaide).

If a leech attaches to the wrong place normal saline on a cotton bud wiped over the leeches head will make the leech detach spontaneously because it cannot tolerate saline. If a leech is forcibly removed it may leave its teeth embedded in the wound or it may regurgitate its stomach contents, both of which could be a source of infection for the patient. The patient will be on oral antibiotics as a preventative measure.

The ancient art of leeching has remained in its rightful place in modern medicine. It is a valuable and effective therapy in the treatment of congestion following microvascular/reimplant surgery. In these days of high-tech medicine, science has not yet been able to mimic leeches unique capabilities. Their use can mean the difference between necrosis of congested tissue or a viable flap or reimplant.

## AWMA JBI Node for Wound Healing and Management (WHAM)

AWMA is very proud to announce an important new resource for its members (which of course includes SAWMA members) – The AWMA/JBI WHAM Node. This provides members with access to a series of brief, evidence based practice sheets on common wound management topics.

The Joanna Briggs Institute (JBI) is internationally regarded for its role in facilitating access to evidence-based practice in health and aged care. The Australian Wound Management Association is a joint partner with JBI to promote evidence based wound healing and management through education, research and consultation. Within JBI CO<sup>N</sup>NECT the WHAM node provides “...an online gateway to a collection of evidence-based resources and tools designed to assist in the clinical decision-making process and to support best practice”.

All SAWMA members can access the WHAM node through the AWMA website ([www.awma.com.au](http://www.awma.com.au)) using their username and password for journal access. Once you access the JBI CO<sup>N</sup>NECT home page enter your journal login again (on the top menu bar: ‘Log in’). This will get you into the site and you can select the Wound Healing and Management node from the menu on the right side of the page.

There are currently over 20 practice sheets available on various topics including: different methods of debridement, use of silversulphadiazine as a topical antimicrobial and compression therapy. Each practice sheet is designed to be a quick and easy to read summary of a selection of literature supported with expert opinion. A ‘clinical bottom line’ makes relevance and implications to practice clear. New practice sheets are added regularly.

I encourage all SAWMA members to access the AWMA/JBI WHAM Node and use the resources there to support and enhance practice.

Note: Due to Intellectual Property issues SAWMA is unable to provide copies of the best practice sheets to its members directly. SAWMA requests that its members respect the privilege of access to the JBI website and resources by not divulging or sharing the username and password with those who are not SAWMA members. Thank you.



*Wound me up before you go-go? (Ed.)*

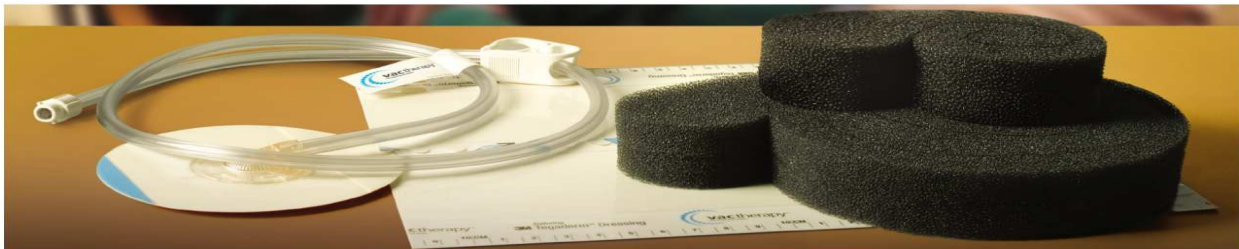


## New V.A.C.® GranuFoam™ Bridge Dressing Kit

The V.A.C.® GranuFoam™ Bridge Dressing is specifically designed to allow the SensaT.R.A.C.™ Pad to be placed away from the wound site.

V.A.C.® GranuFoam™ Bridge Dressing Kits Includes:	
V.A.C.® GranuFoam™ Bridge	Integrated Bridge allows SensaT.R.A.C.™ Pad placement away from the wound site
	Wicking layer helps intact skin stay dry
	Document Label for recording dressing information
V.A.C.® GranuFoam™ Dressing	Pre-shaped components provide flexible wound options
	3 pre-cut circular and 2 pre-cut rectangular V.A.C.® GranuFoam™ dressing pieces
	Perforated design makes sizing easier with minimal or no cutting required
Perforated V.A.C.® Drape	Perforated drape with 5 removable drape strips for ease of use and quicker application
	Pre-cut hole simplifies dressing application

**Special Offer:** To receive your complimentary V.A.C.® GranuFoam™ Bridge Dressing application CD, please e-mail KCI Medical via [marketingau@kci-medical.com](mailto:marketingau@kci-medical.com). with your name, facility and postal address.



## New V.A.C.® Simplace™ Dressing Kit

With fewer steps and faster application, the V.A.C.® Simplace™ Dressing Kits make your V.A.C.® Therapy dressing application easier than ever.

V.A.C.® Simplace™ Dressing Kits Includes	
V.A.C.® GranuFoam™ Bridge	Spiral-cut foam is simple to size to the wound bed
	Provides easy customisation of dressing width and length with minimal or no cutting required, reducing wastage
	Reduces clinician time and effort
	Easier to train staff on dressing application
V.A.C.® Simplace™ Drape*	Easier to handle and apply reducing wastage
	Barrier to outside contaminants
	Provides a moist wound healing environment
SensaT.R.A.C.™ Pad & Documentation Label	Provides accurate therapy delivery
	Documentation label for recording dressing information
	Lower profile, more flexible

**Special Offer:** To receive your complimentary V.A.C.® Simplace™ Dressing application CD, please e-mail KCI Medical via [marketingau@kci-medical.com](mailto:marketingau@kci-medical.com), with your name, facility and postal address.

## Podiatry Article / Healthy Feet = Happy Head?

Walking for just half an hour a day can be as good for your mental health as it is for the rest of your body, but untreated painful feet are discouraging many Australians from being active.

Depression is one of the most common health conditions in Australia, affecting one in five people at some stage in their lives. According to Beyond Blue, around one million adults and 100,000 young people live with depression each year.

Research shows that an exercise like walking can help block negative thoughts and alters the levels of 'feel good' chemicals in the brain such as serotonin, endorphins and stress hormones.

A study from the Centre for Mental Health Research revealed that for older people, exercise is as helpful as antidepressant medication or social contact.

However, walking is not such a simple exercise for many people who suffer foot pain. President of the Australasian Podiatry Council, Brenden Brown says there are simple ways to get people back on their feet.

'Some of my patients don't like to walk because their feet are painful or because walking triggers pre-existing conditions. However, podiatrists are trained to correct these problems'.

Sometimes people begin to exercise and find their feet are painful. They often blame their shoes when in fact it's a problem that could be treated by a podiatrist'.

'It might be as simple as ill fitting shoes or perhaps the patient needs orthotics. Podiatrists are foot specialists and it's this experience that really makes the difference'.

'It makes sense to visit your podiatrist before you begin any exercise campaign, to ensure your feet are in optimum condition'.

To find a podiatrist, go to: <http://www.findapodiatrist.org/>

The National Heart Foundation facilitates free community-based walking groups. Just go to [www.heartfoundation.org.au/sites/walking](http://www.heartfoundation.org.au/sites/walking) to find a walking group near you.

### AWMA Venous Leg Ulcer Guidelines - Draft for comment

The Australian Wound Management Association draft Clinical Practice Guidelines are now available for comment. SAWMA encourages all of its members to review the guidelines and submit their comments via the details listed below:

A copy of the draft guideline can be obtained from:

<http://www.awma.com.au/>

You may make a submission in writing to:

**Postal address:**

Australian Wound Management Association

P. O Box 621

Woden, ACT 2606.

**Fax:** 02 – 6260 5240

**Email:** [secretary@awma.com.au](mailto:secretary@awma.com.au)

The Chair of the Venous Leg Ulcer Guideline Committee is A/Professor David Hardman.

**Closing date**

Submissions must be received by COB **30<sup>th</sup> November 2010.**



*Happy feet anyone? (Ed.)*

Committee members can be contacted via e-mail, the mailing address or through a message left on the SAWMA phone\*: **0406 440 813**

*\* Please note: only text or voice messages will be returned. Missed calls are **unable** to be returned. Thank you.*

This newsletter aims to share information about contemporary issues in wound management. We welcome your contributions, resources, tips, case studies etc. Submit contributions to the editor Frank Guerriero Ph 8222 5771 or email: [editor@sawma.org.au](mailto:editor@sawma.org.au)

## SAWMA Committee Members

### Office Bearers

Ms Sue Templeton	1300 364 264	President
Mr Frank Guerriero	8222 2432	Vice President & Editor
Ms Margi Moncrieff	8204 5797	Secretary
Ms Bec Daebeler	8204 4884	Treasurer
Mr Michael Arthur	8355 3500	Membership Secretary
Mr Paul Philcox	8222 1690	AWMA Representative

### General Committee Members

Ms Andrea Smallman	8204 4091
Ms Lindsey Brooks	0437 771 605
Ms Rosa Stewart	8222 4866
Ms Elizabeth Keen	8222 4000

**All phone numbers are work contact numbers**



## Important Dates 2010 / 2011

**South Australian Orthopaedic Nurses**, Members Meetings 3<sup>rd</sup> May and 13<sup>th</sup> of August. Topics yet to be announced. [www.saon.org](http://www.saon.org) for more information

**Australian Association of Stomal Therapy Nurses**, Branch Meetings 4<sup>th</sup> Wednesday of every month. [www.stomaltherapy.com](http://www.stomaltherapy.com) for more information

**September 2-7 2012, 4<sup>th</sup> Congress of the World Union of Wound Healing Societies**, Yokohama Japan, see <http://www.wuwhs2012.com> for more information

**10th National Australian Wound Management Association Conference**, 18-22 March 2012. [www.awma.com.au](http://www.awma.com.au) for more details

**Pan-Pacific Pressure Ulcer Forum and Venous Leg Ulcer Forum**, 16-17 October 2011. Canberra, Australia for more information visit [www.panpacificulcerforums.com.au](http://www.panpacificulcerforums.com.au)

All expressions of opinion and all other statements in this newsletter and any attachments are published on the authority of the writer/s over whose signature they appear and are not to be regarded as expressing the views of the South Australian Wound Management Association. Where clinical information is provided readers are encouraged to verify this independently. Whilst every effort is made to ensure the accuracy of information, no responsibility is taken by SAWMA for any inaccuracies or omissions.

# Skin grafts and local flaps

Alexandra Turner  
TQEH, Adelaide  
August 2010

## What is a skin graft

- Transplantation of skin from its original site to another
- Used to cover areas of tissue loss from :
  - trauma
  - infection
  - burns
  - surgical

## Classification

- **Split thickness skin grafts (STSG or SSG)** – Epidermis and variable amounts of dermis
- Heals by re-epithelialisation from dermis & surrounding skin
- **Full thickness skin grafts (FTSG)** - Epidermis & all of dermis
- Donor site closed directly with sutures

## Split Skin Graft

- **Advantages**
  - Better survival
  - Less donor site morbidity
  - Quantity/availability
- **Disadvantages**
  - Secondary contracture
  - Cosmesis

## Full Thickness Skin Graft

- **Advantages**
  - Cosmesis
  - Closure of donor site
- **Disadvantages**
  - Less graft take
  - Size limit
  - Pigment changes

## Graft take

- Adherence
- Plasmic Imbibition (graft swelling/oedema)
- Revascularisation
- Maturation

## Dressing a SSG

- Variable:
  - Quilt graft and leave exposed
  - Tie over dressing
  - Jelonet, gauze, Hypafix
  - Jelonet, foam, staples
  - POP

## Post op care

- Immobilise graft to allow take
- **Graft review:**
  - 3 days for SSG's if concerned about haematoma
  - 5 days for uncomplicated SSG's
  - 7 days for FTSG

## complications

- Haematoma
- Seroma
- Shear
- Infection
- Wrong side up
- Trauma
- Avascular bed

## Follow up

- Initial review at 3-7 days
- Then at 1 week, 1 month, 3 months, 6-12 months

## Local flaps

- Utilising excess local skin to fill a defect

**Transposition** – move laterally about a pivot point into an adjacent defect

- **Advancement** – flaps that move forward without rotation or lateral movement
- **Rotation** – flaps that move about a pivot point
- **Islanded** – flaps that move into a defect not directly adjacent to it

## Post operative care for local flaps

- OPD 1 week
- Removal of sutures:
  - Face – 1 week
  - Trunk – 2 weeks
  - Limbs – 2-3 weeks
- Moisturise/massage once healed

## Benefits of local flaps

- Like for like skin
- Cosmesis
- Less contracture
- Simpler post op care

## Free flaps

- Utilising tissue that is taken with its own vessels (artery & vein) to be plumbed into recipient vessels within a defect i.e TRAM breast reconstruction

## Regional flaps

- Utilising tissue distant from the defect but still attached to its own blood supply to fill the defect

## Conclusion

- *Skin grafts* can be used to cover a variety of wounds
  - Critical factors – a healthy 'bed', and immobilisation
- *Local flaps* - superior cosmetic result and minimal post-op care.
  - Critical factor – require laxity of adjacent skin
- *Regional / Free flaps* – used to cover larger defects/ bone exposure

# MANAGEMENT OF SKIN GRAFTS

Helen Fuss

CSC  
Surgical & Specialty Services  
ward 5C FMC  
August 2010

# SKIN

- Largest single organ.
- Acts as a protective barrier (environmental trauma, infection).
- Is a thermoregulator (through sweating, vasoconstriction or vasodilatation)
- Restoration of an intact skin barrier is of utmost importance following a skin injury to prevent infection, minimize wound contraction to maintain function, minimize cosmetic disfigurement and to avoid volume depletion
- Skin grafting was first performed in India 2000 years ago but widespread interest did not develop until the 19th century
- Skin grafting currently represents the most rapid, effective method of reconstructing large skin defects.

## SKIN IS DIVIDED INTO THREE SECTIONS

- EPIDERMIS:
  - Consists of 4 to 5 layers, is avascular and receives nutrients from underlying dermal layers
- DERMIS:
  - Contains blood vessels, sweat glands sebaceous glands, nerves and hair follicles
- HYPODERMIS:
  - Composed of adipose and connective tissue, blood vessels and is involved in the protection of organs

## SKIN GRAFT

- A portion of skin of variable thickness is separated from its blood supply at the donor site and transplanted to another area of the body
- Skin grafts are a standard option for closing defects that cannot be closed primarily
- A skin graft consists of epidermis and some or all of the dermis
- Grafts of any kind require vascularization from the bed into which they are placed for survival
- Any tissue which is not completely removed prior to placement is not a graft

## INDICATIONS

- Burns
- Soft tissue infection
- Acute/chronic wound repair
- Excision of lesions
- Trauma

## GRAFT TYPES

- Full Thickness Skin Graft
  - FTSG
- Split Thickness Skin Graft
  - STSG/SSG

## SELECTION OF DONOR SITE

- Skin grafts can be taken from anywhere on the body, although the colour, texture, thickness of the dermis, vascularity, and donor site morbidity of body locations vary considerably

## FULL THICKNESS SKIN GRAFTS (FTSG)

- Contains all the epidermis and dermis
- Used to cover areas with full thickness loss
- Best for covering small areas, where matching skin colour and texture is important, eg face
- Donor areas include: inside wrist, antecubital fossa, lower lateral abdominal area
- Full-thickness skin graft harvest sites are closed primarily and are therefore of smaller size
- Healing is longer than for a STSG, however end result is more aesthetically pleasing

## SPLIT THICKNESS SKIN GRAFT (STSG)

- Contains all of the epidermis and some of the dermis.
- Can be meshed or not meshed
- Usually taken from anterior thigh, buttock or back, using a dermatome
- The grafted skin is usually established within 72 hours
- Complete healing time varies

## Graft healing process

- The success of a skin graft, or its "take" depends on nutrient uptake and vascular ingrowth from the recipient bed, which occurs in 3 phases
- Phase 1 Inflammatory response (24-48 hrs) – **Plasmatic Imbibition**
  - protein/fibrin layer acts as glue to bind graft to wound bed
  - nutrients diffused from wound bed by a capillary action
  - provides antibacterial environment
  - oedema

## Graft healing process

- Phase 2 **Revascularisation**
  - (48 hours) *Inosculation* - Donor and recipient end capillaries are initially aligned to establish a vascular network
  - (72 hours) Increasing number of vessels connecting
  - (4-7 days) Vessels increasing in functional strength and full circulation until graft established
- Phase 3 **Lymphatic circulation**
  - demonstrated to return at days 5-6 paralleling revascularisation
- Phase 4 **Reinnervation**
  - usually commences within first month after grafting
  - sensation returns to the graft edges and proceeds to centre
  - sensory return is greater in full-thickness grafts
  - FTSG re-inervate more completely than STSG

## POST OP CARE OF STSG

- STSG is initially dressed in surgery
- Kept intact for 3 to 5 days (depending on surgeon's instructions)
- If STSG is on lower extremity patients needs to RIB with leg on pillow
- If on upper extremity or torso, patient able to mobilise as tolerated

## DRESSINGS

- Chosen to provide uniform pressure over graft and prevent haematoma and seroma formation
- Intended to immobilize the graft and prevent shearing
- Should be non-adherent
- Antimicrobial if signs of contamination

## Graft dressings in surgery

- Graft immobility/oedema management
- Tie-over dressing
- Stapled foam
- Topical negative pressure therapy
- Compression bandaging
- Casts/splints

## Dressing removal

- Remove approx 3-5 days after application
- Consider pain relief
- Discuss procedure with patient
- Always request supervision if unsure
- Sharp scissors to cut any sutures (ie tie over)
- Remove layers until paraffin gauze exposed
- Gently lift using 2 pairs forceps

## Dressing removal cont...

- Have a sterile drape, 1 forcep, dressed probes, gloves
- Remove bandage, backslab, Soffban.
- Using forceps gently lift gauze, while applying gentle pressure to Jelonet underneath using dressed probe
- Once gauze is off, repeat the procedure with the Jelonet

## SKIN GRAFT CARE AND DRESSING

- Remove staples/sutures if instructed to
- Trim away any overlapping dead skin
- Remove haematoma or seromas by snipping the skin with scissors and rolling out fluid using dressed probe

## Dressing cont....

- For daily dressings until skin has healed
- Once skin healed no need for daily Jelonet dressing, apply Hypafix
- If no strike through can leave intact up to 7 days
- To remove Hypafix:
  - Soak in paraffin oil – will slide off
  - Use dressing remover wipes
  - Never rip Hypafix off without using these, you may take off graft as well!

## CARE OF FTSG

- Same as STSG, however full thickness grafts take longer to heal
- Haematomas and seromas harder to remove
- Sweat glands and sebaceous glands initially degenerate following grafting
  - they are more likely to regenerate in full-thickness grafts because they are transferred as an entire functional unit

## Factors affecting graft 'take'

- Seroma/haematoma formation
- Poorly vascularised wound bed
- Contaminated/infected recipient wound bed
- Movement of graft from friction/shear
- Oedema
- Technical error/trauma

## Factors affecting healing

- Co-morbidities
- Medication
- Smoking
- Nutrition

## Signs of graft failure

- Persistently white graft
- Dry black graft
- Graft mobile across recipient bed
- Ongoing and final absence of graft tissue

## Donor site STSG

- Where skin has been destroyed beyond the body's natural ability to repair, a skin graft can quickly and effectively help to repair the damaged skin
- The DONOR site is also a site of damage
- The healing process at this location is also quite painful, lengthy and has risks of infection.
  - This gradually subsides as the new skin develops

## Dressing the DONOR site

- The donor site heals by a process of re-epithelialisation
- Epithelial cells migrate across the wound surface from the rim of the wound and the edges plus the various structures in the dermal layer, such as sebaceous glands and hair follicles
- The donor site usually takes about 10–14 days to heal

## Donor site management

- Maintain an environment that promotes optimal healing and prevents morbidity that may include, pain, infection and ultimately delay healing
- Many topical applications/dressings have been used on donor sites
  - But the emphasis is to use products that promote moist wound healing
- Moist wound products prevent desiccation and the deepening of wounds, reduce the risk of mechanical damage to healing tissue at removal, and provide an environment that results in more rapid healing

## DONOR site dressings

- **Mesh Gauze** (eg Jelonet)
  - Removal of the dressing often results in considerable pain and damage to the new epithelium because the dressing becomes dry
- **Polyurethane Semipermeable Transparent Films** (eg Opsite, Tegaderm)
  - Do not have absorptive capacity
- **Hydrocolloids** (eg Comfeel, DuoDerm)
  - Affected by frequency of dressing changes
- **Fibre dressings** (eg SeaSorb, CalciCare)
  - Many of these dressings have haemostatic properties that are useful in the management of donor sites

## Scar management

- Scars are a natural part of the healing process and are a normal consequence of the body's physiological healing response
- The original scar tissue is gradually replaced during the end phase of healing
- The scar redness is reduced and there is a flat, soft, pale scar level with the adjacent skin
- If, however, the delicate balance is not achieved during the healing process, the resulting scar may display abnormalities
- Two such types of abnormal scars are hypertrophic and keloid scars

## HYPERTROPHIC SCARS

- **Hypertrophic Scars** are typically red, firm and thickened
- They can be itchy or painful, which decreases as the scar matures
- The scar is raised but does not grow outside the confines of the original trauma site
- Can result from thermal injuries, trauma, tension on a scar (sutures, or in an area with a lot of mobility eg. knee), or as a result of a foreign body reaction at the time of injury
- Children are highly susceptible to hypertrophic scarring due to the rapid nature of cell formation in the young
- Prone areas are where the skin is relatively thick: the back; the chest (including any surgery in the area eg breast surgery or cardiac surgery); and the shoulders

## KELOID SCARS

- **Keloid scars** are similar in appearance to hypertrophic at the site
- The difference is they invade surrounding tissue
- **Keloid scars are common among people with deeply pigmented skin, 10 to 30 year olds, and in people with thermal injuries**
- **Keloid scars are commonly found on the earlobes, back, shoulders and chest**

## SCAR TREATMENT

Various options are available for the treatment of keloid and hypertrophic scars including:

- surgical revision
- laser surgery
- steroid therapy
- pressure garments
- silicone gel sheets

## Acknowledgement

Andrea Smallman  
CSC Surgical & Specialty Services  
Outpatient Department, FMC

Thank you