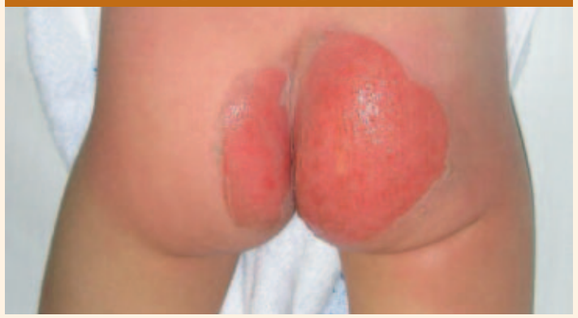
BURN SCAR MANAGEMENT FOR THERAPISTS

Produced by NSW Severe Burn Injury Service – 2004

Michelle Carne OT Anne Darton PT Frank Li PT Justine Snedden PT Cheri Templeton PT

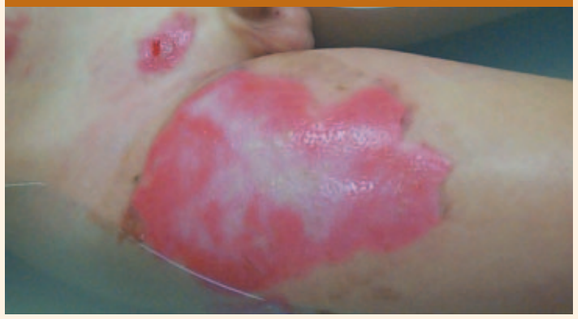
SUPERFICIAL BURNS



Colour - Red, wet and soft, may be blisters
Depth - Mostly epidermal
Blanching* - Present
Healing - Within 14 days
Treatment after healing - Suncare and moisturising cream until burn fades
Continue normal activities
2-3 weeks follow up
Final appearance - No true scarring

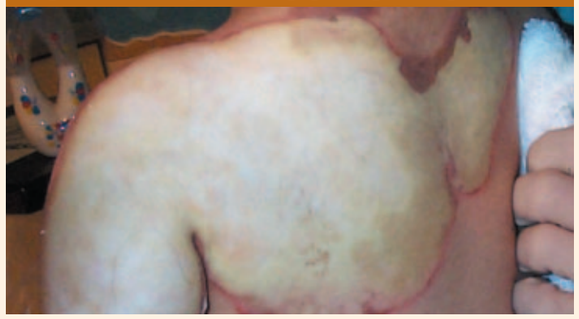
** Blanching - rate of capillary return time following light finger pressure*

PARTIAL THICKNESS BURNS



Colour - Mixture of red and white, wet and mostly soft
Depth - Epidermis and well into dermal layer. (ranges from superficial ➜ full thickness)
Blanching - can be present
Healing -14 - 21 days usually spontaneous or may require grafting
Longer time to heal the more likely to scar
Treatment after healing - Continues as long as burn area remains pink or red and if becomes hypertrophic treat as for full thickness
Suncare/moisturising cream
12 – 18 months
Final appearance - Possible scarring

FULL THICKNESS BURNS



Colour - White, dry, leathery to touch
Depth - All epidermis and dermal layer including hair follicles and sweat glands
Blanching - None
Healing - Requires grafting
Treatment after healing - Pressure garments
Contact media
Splint and exercise
Suncare/moisturising cream
12 – 18 months
Final appearance - Definite scarring

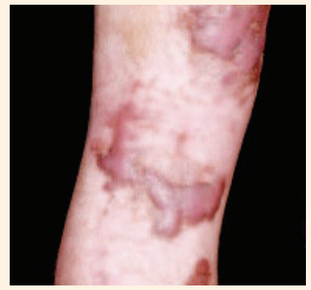
ELECTRICAL BURNS

- Appearance is often deceptive
- Usually deep and devastating
- Entrance and exit wounds are usual
- Contact a Burns Unit and consult a Burns Specialist/Surgeon

HYPERTROPHIC SCARRING

Common following delayed healing and grafting

Appearance
- Red
- Raised
- Firm to touch



SCAR INDICATORS

Healing Time
- Less than 14 days - rare
- 14 - 21 days - possible
- 21 days plus - usual

High risk groups include
- Children
- Areas of mobility
- Non Caucasian

SPLINTING

- Functional position is not necessarily the splinting position
- Usually worn at night and short periods during the day
- If burn is close to or over a joint often necessary to maintain full range of movement by splinting

EXERCISE

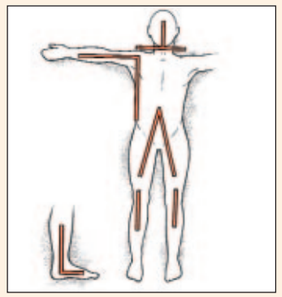
- Begin at day 1-2 if possible, gentle and active is preferable
- As oedema decreases full range should be reached, maintained daily and if necessary use a splint
- Encourage early participation in functional activities
- Return to full ROM as soon as possible following graft stability

POSITIONING

- If burn involves the neck area no pillows
- *Position of comfort is the position of contracture*

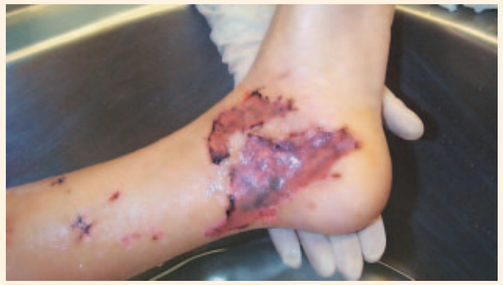
Guidelines for positioning

incorrect		*correct*	
Neck	- flexed + side tilted	**Neck**	- central + extended
Arms	- flexed, adducted + internally rotated	**Shoulders**	- 90° abduction with 10° flexion
Hips	- flexed + rotated	**Elbows**	- extended + palms up
Knees	- flexed	**Hands**	- splints essential if burnt
Feet	- dropped	**Knees**	- extended
		Feet	- 90° flexion irrespective of burn

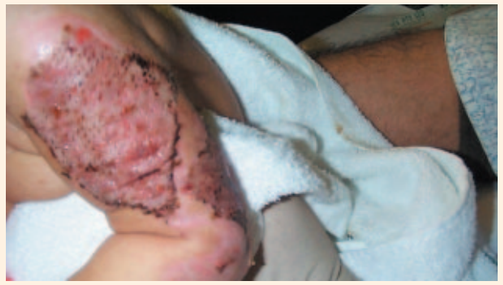


Possible problems:
- contractures + deformities
- gait interference - achilles shorten
- partial/total hip dislocation

TYPE OF GRAFTS



Sheet graft
- Often used on small burn areas eg face, hands



Mesh graft
- Used on large burns

SCAR TREATMENT OPTIONS

Treatment options may be used independently or in combination

Pressure Therapy
- Adhesive tape
- Cohesive bandaging
- Tubular elastic bandages
- Custom made garments

Contact Media
- Silicone gel sheets
- Hydrocolloid dressings

References

Thomas A. *et al*, International Clinical Recommendations on Scar Management, Plastic and Reconstructive Surgery, Aug 2002, 110(2), 560-571

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Malick MH & Carr JA (1982) Manual on Management of the Burn Patient Pittsburg: Harmarville Rehabilitation Centre

Roderick B. et al, Splints and Scar Management for Acute and Reconstructive Burn Care Clinics in Plastic Surgery, Jan 2000, 27(1), 71

Richard R. et al,(1994) Burn Care and Rehabilitation: Principles & Practice Philadelphia: F A Davis Company

For more information contact therapists at:
- **Concord Repatriation General Hospital (02) 9767 5000**
- **Royal North Shore Hospital (02) 9926 7111**
- **The Children's Hospital at Westmead (02) 9845 0000**

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