Scar Management

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Introduction

Scar is the result of injury, whether iatrogenic or natural. Not all factors that determine the final outcome of the scar are known. In this short note, the writer will try to list out the available means to make the final outcome of the scar on the skin more acceptable.

Prevention

More education to public in risk management will result in less industrial & domestic accidents. It is also important for the public to realise that a medically managed wound always gives a better scar than a self treated / untreated one.

History & Examination

The doctor must note down the patient’s age, when, where & how the injury was inflicted, what was done & the present treatment regime; plus related past health, medication & psychological history. The physical examination will chart down the size, location & typing (maturity, keloid?) of the scar, the resulting loss of function & asymmetry (static & dynamic). It is during the history & physical examination process that the rapport with the patient (& the family) should be well established. This is essential as scar management is never a brief treatment process.

Conservative Management

Most scars will gradually mature & improve, except keloid; though the maturation period is different with different races. Other than some minorities that have Caucasian characteristics, the maturation period for most Chinese people is 6 to 9 months.

UV light can cause the scar to be more obvious especially for keloids & to some extent hypertrophic scars. Smoking (whether 1st or 2nd hand) will lengthen the period by 2 to 3 times. Patients with newly formed scars have a higher chance of keloids formation if they ingest food or soup cooked with ingredient of Snakehead fish.

The patients should be informed of the approximate time of the scar progression; cautioned to avoid UV light, smoking & Snakehead fish.

Pressure garment bought over the counter & not tailored made is only useful for psychological support. Tailored made pressure garment by the Occupational Therapist should be used with common sense; as wearing it in the hot & humid weather in Hong Kong will do more harm than good unless in an air conditioned cool environment. (fig. 2)

The same is true for the application of Silicone Gel. (fig. 3)

Massage of the scar is very useful if correctly taught. The mal-aligned collagen fibres in the scar will be realigned more properly & is most helpful to hypertrophic scars. It is also most useful to patients with impending scar contracture. (e.g. primary cleft lip repair)

Make up, hair styling & dressing can reduce the effect of scarring. The 2 photos below illustrate what my cosmetician can do to the outlook of a person.
Follow Up with Planning & Expectation

Very often the wounds heal well & the resulting scars also become soft & similar in colour to the surrounding skin. However these scars will not grow at the same speed as the rest of the body. With growth spurt in paediatric patients, scar contracture will occur; & if treated late or left untreated, will lead to facial asymmetry (static or dynamic), decrease joint movement & joint deformities.

Telling the parents what are the possible outcome & treatment protocol will ensure their compliance to yearly or half yearly follow up till full grown. Do not send these patients away & instruct them only to come back when contracture occurs; because the prime time may have passed or their files already destroyed!

Release of Scar Contracture

The spirit of management of scar contracture is anticipation with regular follow up. When contracture does happen, one can either refer or performed the release operations. The release procedures available are multiple z-plasty (fig. 5), local flap, full thickness skin graft & even free flap.

The full thickness skin graft should be taken from an area that matches the recipient site; for example skin from back of ear is good for the face. Using the preputial skin graft for release of joint contracture is very acceptable by Chinese parents as they thought circumcision is good for growth development. To the surgeons, the preputial skin is most stretchable with no underlying fat & there is little worry of another operation when the patient grows up further.

Scar Excision, Revision

Ugly narrow scar almost parallel to skin crease can be excised & re-sutured. If the scar crosses the skin crease at a big angle, it should be excised plus multiple z-plasty or w-plasty; to make the new scar more parallel to the skin crease.

For hair bearing area like the scalp, scar can be excised, serially excised or, insertion of tissue expander followed later by excision. Hair transplant is also quite effective for scars on the scalp & eyebrow region.

Keloids

Keloid can occur soon after wound healing or sometime later. Some areas are more common to form keloids.

Keloids are occasionally itchy & painful. They grow beyond the size of the original wound & are progressive. Steroid injection can reduce the attacks of itchiness & pain. Excision usually results in a recurrence of bigger size. Only excision plus immediate postoperative irradiation may improve the outlook; though there is still a chance of 15 to 20% recurrence.
Conclusion

Scar management is a long battle. Both doctors & patients need to spend time & have patience. Whether it should be provided in the public service or not is a matter of debate; but it certainly is not 'unimportant' as commented by some public medical administrators!

References


Society News

Welcome New Member

The Hong Kong Society of Professional Optometrist
Office-bearers for the year 2009-2010 are as follows: President: Ms. Rufina CHAN; External Secretary: Dr. Helen ENG; Treasurer: Mr. Jack WONG

The FMSHK would like to welcome The Hong Kong Society of Professional Optometrists as associate member of the Federation.

News from Member Societies

Asian Surgical Association
Updated office-bearers for the year 2009-2010 are as follows: President: Prof. Po-huang LEE; Honorary Secretary: Prof. Kent-man CHU; Honorary Treasurer: Prof. William WEI

Australian Doctors & Dentists Association of Hong Kong
Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Ben FONG; Honorary Secretary: Dr. Robert LI; Honorary Treasurer: Dr. Lewis FUNG

Hong Kong Nutrition Association
Updated office-bearers for the year 2008-2009 are as follows: President: Ms. Ivy NG; Honorary Secretary: Ms. Carmela LEE; Honorary Treasurer: Mr. Kenny CHENG

Hong Kong Society of Digestive Endoscopy
Updated office-bearers for the year 2008-2009 are as follows: President: Prof. James Yun-wong LAU; Honorary Secretary: Prof. Joseph Jao-yiu SUNG; Honorary Treasurer: Dr. William Sai-chik CHAO

Hong Kong Society of Endocrinology, Metabolism and Reproduction
Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Kathryn Choon-beng TAN; Honorary Secretary: Dr. Wing-sun CHOW; Honorary Treasurer: Dr. Wing-yee SO

Hong Kong Society of Orthodontists
Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Ricky W.K. WONG; Honorary Secretary: Dr. C.D. TRAN; Honorary Treasurer: Dr. Lily M.Y. SHUM

Osteoporosis Society of Hong Kong
Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Sue Seen-tsing LO; Honorary Secretary: Dr. Andrew Yuu-yen HO; Honorary Treasurer: Dr. Jenny Yin-yan LEUNG

The Hong Kong Society of Neurosciences
Updated office-bearers for the year 2008-2009 are as follows: President: Prof. Wing-ho YUNG; Honorary Secretary: Prof. Kwok-yan SHUM; Honorary Treasurer: Prof. Ya KE

The Society of Anaesthetists of Hong Kong
Updated office-bearers for the year 2009-2010 are as follows: President: Dr. Chi-wai CHEUNG; Honorary Secretary: Dr. Ha-yun LEE; Honorary Treasurer: Dr. Tze-yan LI

The FMSHK would like to send its congratulations to the new office-bearers and looks forward to working together with their societies.