



Get ready for a fresh take on life.
Sign up and start living fresh now>>



THE **sp1** A SINGAPORE PRESS HOLDINGS WEBSITE

STRAITS TIMES



JOBS

DIGITAL:HTML

Sep 2, 2009 Wednesday

THE STRAITS TIMES
BREAKING NEWS



TOP STORIES

SINGAPORE

ASIA

WORLD

MONEY

REVIEW

INSIGHT

[Home](#) > [Mind Your Body](#) > [Health Help](#) > Story

Sep 3, 2009

Doc talk

Scarred for life

By [Dr Jean Ho](#)

[email](#)
[print](#)
[larger](#)
[smaller](#)
[discuss](#)



I will always remember the day my schoolmates and I received our BCG vaccinations.

BCG, or Bacillus Calmette-Guerin, is the vaccine for the tuberculosis (TB) infection. It was named after two Frenchmen, a microbiologist and a veterinarian, who discovered it in 1908.

My most vivid recollections were not of the stern demeanour of the nurses as they went about their tasks, nor the nervous chatter of the students as we stood in line, waiting our turn.

My most unforgettable memory was of the swelling and soreness after the vaccination,

followed by a horrific-looking ulcer that appeared on the skin. After what seemed like forever, the ulcer finally healed but it left an indelible scar on my left upper arm.

It is an unmistakable scar. This distinctive bump on the skin, the size of a large pea, has become the trade mark of schoolchildren growing up in Singapore. Like most others, I am not bothered much by it now.

Not everyone is as fortunate. In about one in 20 people who receive the BCG vaccination, the scar develops into a keloid.

These keloid scars are thicker, larger and redder. They do not stop growing but continue to increase in size, even many years after they first appear. Keloid sufferers, apart from living with the physical disfigurement, often report persistent pain or itch within the scars.

For 35-year-old Julie, the keloid scar on her arm appeared shortly after her vaccination and had been enlarging over the years.

When I saw her, it had become an elongated firm rubbery growth extending from the shoulder down to her mid-arm. Sometimes the scar would 'act up' - it would hurt and itch. Julie kept her scar hidden from view at all times.

Simply explained, a keloid is a scar gone 'wild'.

When there is a wound, the skin normally heals through a process of checks and balances, repair and restoration. The factors which stimulate cell growth, such as Transforming Growth Factor Beta (TGF beta), are balanced against the factors which limit growth.

However, when tissue growth goes into overdrive, wound healing spirals out of control, like a runaway train. A keloid ensues.

The reasons for keloids are not entirely known. They are more usually seen in dark-skinned individuals such as Asians and blacks, and there is often a family history.

Certain locations on the body are more prone to keloids. The chest, back, shoulders and ear lobes (such as after ear piercing) are regarded as danger zones. Keloids may appear after surgery, a bout of chicken pox or even something as common as acne or insect bites.

Smaller keloids, especially those occurring in children, can be treated painlessly with silicone gel or plaster. This method works by keeping the scars covered and hydrated. Alternatively, keloids can be treated with liquid nitrogen (cryotherapy).

Larger keloids are treated with corticosteroid injections which are administered via a fine needle and directed into the core of the scar. Corticosteroid injections suppress the anomalous growth of the keloids and are very effective in softening and flattening them.

Lasers are now complementing these traditional therapies by remodelling and reorganising the collagen within the scar. The result is significant flattening and lightening of the scar.

Removal of the keloid by surgery is considered only as a last resort as keloids are highly

notorious for bouncing back with a vengeance. Post-surgery follow-up and treatment are crucial in ensuring that the scars do not recur.

I treated Julie's keloid with a combination of corticosteroid injections and laser treatment, till it was resolved to our satisfaction.

In 2001, the Ministry of Health discontinued the BCG vaccination for primary schoolchildren. It was found that while vaccination at birth was still highly effective and relevant in preventing TB, the repeat vaccination given between the ages of 12 and 16 was not.

Scars, once formed, do not ever disappear completely.

Prevention is thus the best strategy. Conditions such as acne, which often result in scars, should be treated early. Ear piercing, especially through the cartilage at the top of the ear, is prone to result in keloid scars too.

Early detection and treatment of the immature scar will nip it in the bud and prevent it from worsening.

As studies continue to uncover the intricacies of how our tissues heal, we can look forward to newer strategies or drugs that may treat scarring more effectively. By turning the right keys, perhaps, we will live to see a truly scar-free era emerge.

jeanho@drjeanho.com

Dr Jean Ho is a consultant dermatologist with special interests in paediatric dermatology and laser surgery. She practises at Mount Elizabeth Medical Centre.

Ads by Google

[Cheap Singapore Flights](#)

Need a break? Why Not Visit Singapore? 170+ Websites. Save!
Mobissimo.com/Singapore

[The Singapore Miracle](#)

An incisive expose of the dubious aspects of the Singapore Miracle.
www.insightpress.com.au

[Top Singapore News](#)

Get Breaking Singapore News From FT.com - View Articles Now
FT.com

[Lock+Store Self Storage](#)

Home, Business, Wine & Aircon Storage with 24x7 Access. Singapore
www.LockAndStore.com.sg

[Cheap Singapore Hotels](#)

Compare Hotels In Singapore. Find The Cheapest Hotels Online.
CheapEurope.com/Singapore



S M T W T F S
 30 [31](#) [01](#) [02](#) [03](#) [04](#) [05](#)
[06](#) [07](#) 08 09 10 11 12

Take Our Poll Site Map FAQ About Us Adv
 STI Widgets Newlink NewsPost ANN
 Best viewed at 1152x864 resolution with IE
 Singapore Press Holdings Ltd. Co. Regn No
 Conditions