

## The Dreaded Bump

Different treatment options to get rid of keloid scars  
by Dr Eileen Lew



**THE SKIN REPAIRS** itself in a complex healing process. When the skin gets injured, the body springs into action to heal the wound. First, it tries to limit blood loss by reducing the amount of blood flowing to the wounded area. Proteins in blood, such as fibrin, work with the blood platelets and plasma to form a scab which acts as a protective covering. While the skin regenerates underneath the protective layer, the scab protects the wound from outside infection.

The wound is gradually healed as new granular skin tissue begins to generate. Once the wound underneath has sealed itself with another skin layer, the scab will fall off on its own.

If the cut or scrape was a shallow one that only affected the outer epidermis layer, then the likelihood of leaving a scar is low. If the cut went deeper into the deeper layer of the skin (dermis), then the body moves to create

fibrous scar tissue from the granular tissue. An average of three to six weeks is required to bridge a deep cut, producing a protein called collagen at the site of the wound to repair it. Even after the wound is healed, it can take up to two years for a scar to settle into its permanent appearance. Most scars are whitish and lay flat on the surface of your skin. But some scars, such as hypertrophic scars and keloids, take on an unusual appearance.

In this article, I shall be touching on an increasingly common scar presentation – keloids. I will also explain the difference between hypertrophic scars and keloid scars, which can appear similar especially in their initial stages.

### What are keloids?

When wounds heal, there is a tendency to leave a flat scar. Sometimes, during the healing process due to mechanisms

not yet completely understood, the scar tissue overgrows and thickens, thus appearing to protrude out of the normal level of the surrounding skin.

When this thickened scar tissue is confined within the margins of the wound, it is termed a hypertrophic scar. These types of scars can subside over a period of time without treatment.

Keloids occur when this overgrowth of thickened scar tissue extends beyond the margins of the original wound, and have a tendency to migrate into the surrounding areas that were not originally injured. They typically occur after an injury or surgery, but can also occur after even the most minor of skin inflammation such as acne or ear piercing.

### What do keloids look like?

Keloids are usually irregularly shaped, and extend beyond the margins of the

original wound. They usually feel hard and rubbery; new ones are often red/purple and can become either darker or paler as they age. For some, other than the potential cosmetic problems they cause, keloids may have no other physical symptoms; while for others, they can be itchy or even painful.

There are certain high risk zones for keloid formation. These include the sternum (breastbone) area of the chest, upper back, ear lobes and deltoid region of the upper arm where injections are commonly placed. On the face, the jawline has been recognised as a high-risk zone.

### What causes keloids?

The scar formation process is complex. No one knows exactly why most people never get keloids, while some develop them even after the mildest of inflammation such as acne or simple ear piercing.

Keloids are equally common in women and men, although at least in general, the prevalence appear to be higher in females than in males, probably reflecting the greater frequency of earlobe piercing among females. Onset occurs most commonly in individuals aged 10 to 30 years old, and less frequently at the extremes of age.

There are several factors that seemingly increase the risk of some people developing keloids. These include the following:

- Darker skin-type people
- Wounds that are under too much tension, or get infected while healing
- Personal history of previous keloids
- Genetics such as family history may also play a part. As such, if a parent has a history of keloids, his or her child may also have an increased risk of developing keloids.

### What are my treatment options?

When embarking on the treatment of keloids, the education of patients on

There are certain high risk zones for keloid formation. These include the sternum (breastbone) area of the chest, upper back, ear lobes and deltoid region of the upper arm where injections are commonly placed. On the face, the jawline has been recognised as a high-risk zone.

their spontaneous and unpredictable nature and the management of patients' expectations are important.

Although there is at present no definite cure, with advances in medical technology, there are certainly effective treatments that can help improve the cosmetic appearance of keloids significantly. These include non-surgical and surgical methods. The former includes treatment options such as application of moderately strong steroid creams on keloids. Injections of steroids into keloids can also be administered at regular intervals (e.g. monthly) till maximum benefits are obtained. This is safe as very little enters the bloodstream. Patients can usually see good results in the flattening of keloids if compliant to treatment schedule.

Combination treatments with lasers such as V-beam and CO2 laser can also be performed to further improve the aesthetic outcome of the keloids, especially in their redness.

Surgical intervention may also be an option. However, the main problem about cutting a keloid is that such trauma often leads to a recurrence or even bigger keloid forming later in the same place. As such, patients who are considering keloid surgery should have a detailed discussion with their doctor, and be made fully aware of the risks involved.

### Prevention is Better Than Cure

In summary, keloids are an increasing aesthetic issue seen in clinical practice.



Prevention is always better than cure. Thus, if a patient possesses any of the risk factors as mentioned earlier above, it will be advisable to avoid body piercing and tattoo especially on high-risk zones of the body. Elective cosmetic surgery on the skin should also be avoided.

As acne is also known as a potential cause for keloids, it is important to treat acne early to prevent deeper inflammation and permanent scarring. <sup>eh</sup>



Dr Eileen Lew is the Medical Director of LE Private Clinic, located at Scotts Medical Centre 9 Scotts Road (Pacific Plaza) #08-04, Singapore 228210. For more information, visit [www.leprivateclinic.com](http://www.leprivateclinic.com), or call 67335755.