



## **KELOIDS**

### **What are the aims of this leaflet?**

This leaflet has been written to help people understand more about keloids. It explains what they are, what causes them, what can be done about them, and where more information about them can be found.

### **What are keloids?**

As a wound heals, scar tissue forms. Initially, the colour and texture may differ from the surrounding skin, but this usually flattens and fades with time. It is not uncommon for a scar to become slightly thick and raised. This is called a hypertrophic scar. However, a keloid (also called a keloid scar) is the name given to a scar that overgrows and becomes larger than the original wound. Unlike hypertrophic scars, keloids:

- Can develop after very minor skin damage, such as an acne spot, or sometimes without any obvious trauma to the skin (spontaneous keloids);
- Spread beyond the original area of skin damage;
- May be permanent.

### **What causes keloids?**

This is not fully understood, but keloids happen when there is over production of collagen (the skin's structural protein). They are not contagious. They can affect anyone, but they are more common in some groups (e.g. people of African, Asian, or Hispanic descent). Only a minority of people develop keloids. There are some risk factors that increase the likelihood of a person developing keloids.

### **Keloid scars:**

- are more common after skin injury on the upper chest, breastbone (sternum), shoulders, chin, neck, lower legs and earlobes (especially after ear piercing)
- are most likely to form following burns, acne scars and wounds that become infected or where the skin becomes significantly tight whilst healing
- may develop from surgical scars
- are more likely to affect people who have previously had a keloid if their skin is damaged again
- most commonly arise between puberty and 30 years of age
- may appear or enlarge during pregnancy.

### **Are keloids hereditary?**

Not usually, but the tendency to develop keloids can run in families. Studies have shown that 5-10% of Europeans with keloids have a positive family history (at least one other member of their family has keloids).

### **What are the symptoms of a keloid?**

While keloids are growing, they may feel itchy, prickly and/or sore. Once they have stopped growing there is usually no discomfort. If they are located over or near a joint, they can restrict movement.

### **What does a keloid look like?**

Keloids are enlarged, raised scars. They can be skin-coloured, pink/red/maroon, or darker than the surrounding skin. They usually feel firm and smooth. They are shiny and hairless. A keloid can appear within 3-4 weeks of a skin wound but can take a year or longer to appear. A keloid may continue to grow for months or years. Multiple keloids may develop, especially after acne or chickenpox, although most people only have one or two.

### **How is it diagnosed?**

The doctor will usually make the diagnosis of a keloid just by looking at the skin; so no tests are needed. If the diagnosis is uncertain, a skin biopsy can be taken (a procedure in which a small sample of skin is removed from the affected area under local anaesthetic, processed, and examined under a microscope).

### **Can a keloid be removed?**

Surgically removing/excising (cutting out) a keloid is rarely a success as this can cause a larger wound and the keloids is likely to regrow in it. If it is excised, the risk of regrowth may be reduced by compression dressings or steroid injections following the procedure (see below).

### **How can a keloid be treated?**

Unfortunately, there is no cure for keloids. Treatment can sometimes help to flatten them and reduce irritation. There is currently no evidence that any single form of treatment is better than another and keloids often regrow in the same place. Treatment options include:

- Injection of a steroid into the keloid i.e. intralesional injection. This is the most common treatment. Injections can be repeated e.g. monthly for 4-6 months. Steroids can make the skin thin, fragile and pale. Up to 50% of keloids grow back.
- Applying a strong steroid cream or steroid-containing tape. These require a prescription.
- Silicone dressings or gels are safe and can be bought from a pharmacist without prescription. If used for several months, they can reduce the thickness and make the keloid paler.
- Compression with bandages or devices (such as clips or splints) may sometimes help, particularly on the earlobe and for keloids on the torso.
- Radiotherapy can be given after surgical removal of keloid scars. However, it carries a small risk of causing skin cancer as a result of exposure to radiation, so is rarely used.
- [Cryotherapy](#) can be tried alone or in combination with other treatment methods. It can cause loss of skin pigment
- Laser therapy can help, especially if combined with injected steroids.
- Experimental treatments include botulinum toxin injections; injections of the anti-cancer drugs 5-fluorouracil (5-FU) or bleomycin; and photodynamic therapy. These options are not routinely available and further research in these areas is required.

### **What can I do?**

For people at increased risk of developing keloids or those already affected by keloids, it is advisable to avoid skin trauma where possible (e.g. tattooing, body piercing and unnecessary surgical procedures). This is particularly important for high-risk areas such as the chest and earlobes. In the case of

acne, prompt and effective medical therapy is important to limit the risk of scarring.

### **Where can I get more information?**

*Web links to further information:*

<https://patient.info/health/keloid-leaflet>

<https://www.dermnetz.org/topics/keloids-and-hypertrophic-scars>

**This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.**

*This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel*

**BRITISH ASSOCIATION OF DERMATOLOGISTS**

**PATIENT INFORMATION LEAFLET**

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