

## Patient Diagnosis Resource for **KELOIDS**

### *Your Diagnosis*

Your doctor has determined that you have one or more keloid scars, or keloids, which are raised nodules of excess scar tissue that form after a skin injury. They are not cancer and do not increase the risk of developing skin cancer.

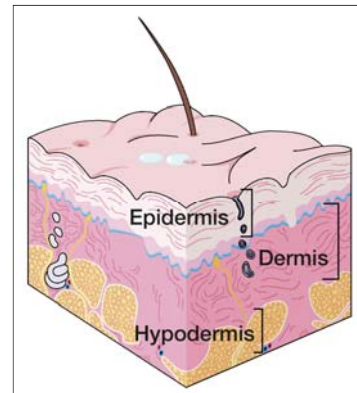
Keloids occur at about the same rate in men and women, and most frequently in darker-skinned individuals such as African-Americans and Asians. The condition usually affects people between the ages of 10 and 30 but can happen at any age.

### *About the Condition*

The skin is the largest organ of the body. Its top layer is the epidermis, which provides protection against the environment. The second layer of the skin is the dermis, which supplies blood, oxygen, strength and support. Underneath the dermis is the hypodermis, or subcutaneous fat layer, which provides an ongoing blood supply to the dermis.

A keloid occurs when the body produces an overgrowth of scar tissue that extends into unaffected areas after an injury or trauma to the skin. Insect bites, acne and chickenpox can also be keloid triggers. The excess tissue usually grows slowly over a period of months to a year or longer, reaching well beyond the original scar and forming a mass.

Keloids are reddish when they first develop and become brownish-red then pale over time. Symptoms may include itchiness, tenderness, burning or pain.



The texture of a keloid can range from doughy and soft to hard and rubbery. Most are round, oval or oblong. Some may have a claw-like appearance and more irregular borders. The most common locations for keloids are the face, chest, neck, shoulders, back, abdomen and ears, where they can form after ear piercing.

Generally keloids do not go away without treatment and can come back after being removed. A keloid may also cause a contracture, or permanent shortening of the scar tissue, which can restrict movement if it overlays a joint or result in serious disfigurement.

The tendency to develop keloids often runs in families, likely because of a genetic component.

### *Treatment Options*

Keloids can be treated in a variety of ways depending on factors such as nodule size, depth and location and your age, general health condition and personal preferences. Sometimes more than one treatment may be used at the same time.

The following treatment possibilities are available:

**Cryosurgery** – This treatment method uses super-cooled gas to freeze and flatten keloids, and is often performed in combination with corticosteroid or interferon injections.

**Excision** – Cutting off keloids with a scalpel is another treatment option. It is most effective when combined with corticosteroid or interferon injections, compression therapy or radiation.

**Laser Therapy** – A high-intensity light, or laser, can be used to flatten keloids. Laser therapy is sometimes given in combination with corticosteroid injections.

**Radiation Therapy** – Another keloid treatment method is radiation therapy, which uses a high energy X-ray machine to direct radiation at the nodule. Occasionally radiation therapy is delivered internally via small radioactive pellets implanted directly into the skin.

**Corticosteroid Injections** – One of the most often used treatments to flatten keloids is the injection of corticosteroids directly into the scar tissue.

**Occlusive Dressings** – Another standard treatment is the use of occlusive dressings, which do not allow moisture loss or access to the air. These may include silicone gel sheets, non-silicone sheets or medicated tape.

**Compression Therapy** – Mechanical pressure, or compression therapy, has long been employed as an effective treatment for keloids. Among the many devices used are pressure earrings, special stretchy garments and elastic or Lycra bandages.

**Interferon Therapy** – One of the more recent developments in keloid treatment is the injection of interferon directly into the scar tissue.

**Other Therapies** – A variety of other therapies are now being used to treat keloids, such as anti-transforming growth factor, verapamil, bleomycin, 5-fluorouracil, retinoic acid and imiquimod.

## **What You Can Do**

You should be sure to tell all of your doctors about your history of developing keloid scars. Other steps you can take to lessen their occurrence include:

- ◆ Avoiding non-essential surgery and sharp trauma to the skin, such as piercings and tattoos
- ◆ Controlling inflammatory acne if you have it

Also be sure to keep all of your follow-up appointments with your doctor.

## **Additional Resources**

American Academy of Dermatology, 888.462.3376, [www.aad.org](http://www.aad.org)

*This patient resource sheet is provided to you as a service of CBLPath® and is intended for information purposes only. It is not meant to serve as medical advice or a substitute for professional medical care. Treatment options may vary, and only you and your physician can determine your best treatment plan.*