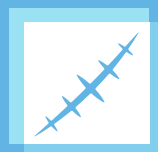




YOUR KELO-COTE® GUIDE

**TO LIVING WITH  
YOUR SURGICAL  
SCAR**



**KELO-COTE®**  
SCAR TREATMENT

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\*The recommendation to use KELO-COTE® is a clinical decision.  
This guide is for reference only, please seek medical advice for any further information.

## KELO-COTE® GUIDE

# TO LIVING WITH YOUR SURGICAL SCAR

KELO-COTE® has been helping people to manage their scars for over a decade, so we understand how scarring can affect you emotionally as well as physically.<sup>1</sup>

In order to help those with recent and existing scars, we've put together this handy guide to treating, managing and living with scarring.\*

### What is the definition of a scar?

A scar is a mark that is left on the skin when a wound or an injury to the surface of the skin has healed. Scar formation is a natural part of the healing process.

The time skin takes to heal will vary depending on a number of factors including wound size, depth, and location; the person's age; heredity; and skin characteristics including colour (pigmentation).<sup>2</sup>

The longer it takes for the skin to heal, the greater the chance of a noticeable scar. Scarring is the final stage of the healing process, but not all scars will become abnormal scars. Abnormal scars can occur up to 18 months later, after the creation of the scar.<sup>3</sup>

### What types of scars are there?

#### Keloid scars

Caused by an excess of scar tissue produced at the site of the wound where the scar grows beyond the boundaries of the original wound, even after the wound has healed. They are often raised and itchy.<sup>3,4</sup>

#### Hypertrophic scars

Starting as red, raised scars they become flatter and paler over the course of several years. Unlike keloid scars, hypertrophic scars don't extend beyond the boundary of the original wound, but they may continue to thicken for up to six months.<sup>4</sup>

#### Contracture scars

These are usually hypertrophic.<sup>5</sup> Caused by the skin shrinking and tightening, usually after a burn or a breast implant, which can restrict movement.<sup>4</sup>

#### Pitted (atrophic or 'ice-pick') scars

Pitted scars have a sunken or pitted appearance and are often caused by skin conditions such as acne and chickenpox.<sup>4</sup>

#### Normal fine line scars

A red, raised line often appearing after a minor wound like a cut. This will gradually get paler and flatter over time, taking up to 2 years, but will never completely disappear.<sup>4</sup>

## Scars Resulting from Surgery

Red and lumpy (hypertrophic) scars can occur within weeks of surgery, and may increase in size rapidly for 3-6 months. They usually fade and soften on their own, however this may take up to 2 years. Scars which occur beyond the extent of surgery are called keloid scars which are red, lumpy, and sometimes painful and itchy. Gels and dressings containing silicone (such as KELO-COTE®) have been shown to reduce the formation of keloid and hypertrophic scarring after surgery.<sup>5</sup>

### How common are scars?

Scars are very common and although they are permanent, they can fade over a period of up to two years. However after this time, it is unlikely they will fade anymore.<sup>4</sup> Keloid scars occur in 10-15% of wounds.<sup>6</sup> They can affect anybody but they are most common between the ages of 10 and 30 and in people with dark skin, such as people from African, African-Caribbean and south Indian communities. Hypertrophic scars are more common, with incidence rates varying from 40-70% following surgery, and up to 91% following burn injury.<sup>7</sup>

### Why do they form?

When the skin is wounded and there is a break in the body's tissues, the body produces more of a protein called collagen, as part of the healing process. Collagen builds up where the tissue has been damaged, helping to heal and strengthen the wound. For a period of about three months or longer, new collagen continues to form and blood supply increases, causing the scar to become raised, lumpy and red. Some collagen then breaks down at the site of the wound, the blood supply reduces and the scar gradually becomes smoother, softer and paler.<sup>3</sup>

## Taking care of your wound

### Hygiene

Your surgeon will tell you when you should remove your original dressing, this may vary.

Before you remove the dressing, wash your hands with soap and water and then carefully take off the dressing. Try not to touch the healing wound with your fingers. The hospital may give you a replacement dressing to use at home. Apply the dressing carefully and don't touch the inside of it. Don't use antiseptic cream under the dressing.<sup>8</sup>

### Keep it covered

Over the past 20 years, studies have generated much evidence to show that a moist wound environment is essential for wound healing.

Covering up a wound with a moist wound healing product provides protection to the wound and surrounding tissue, while regulating the wound surface. This will also maintain a good moisture balance to minimise discomfort before, during, and after dressing changes. Some may have antimicrobial properties to help prevent infection.<sup>9</sup>

N.B If however you notice any issue with the wound, please seek medical advice.

### Protect from the Sun

UV exposure has been shown to influence the wound healing process by causing immediate UV-induced inflammation, followed by increased skin pigmentation, which may result in long term pigmentation of a fresh or recent scar.<sup>10,11</sup> It is therefore very important that scars are protected from the sun. The NHS recommends that complete sunblock is used on the effected area.<sup>12</sup>

## What is the impact of scars?

- People with abnormal skin scarring may experience physical, aesthetic, psychological and social consequences that may be associated with substantial emotional and financial costs.<sup>13</sup>
- People with scars may experience wide ranging effects that have major influence on their psychological wellbeing, which can lead to a diminished quality of life.<sup>13</sup>
- Scars can cause itching, tenderness, pain, sleep disturbance, anxiety, depression and disturbance in daily activities.<sup>13</sup>

## Who to talk to

If you feel that your scars are making you depressed or affecting your daily activities, make sure you visit your GP. Or if you have any other concerns regarding your wound, then please seek medical advice.

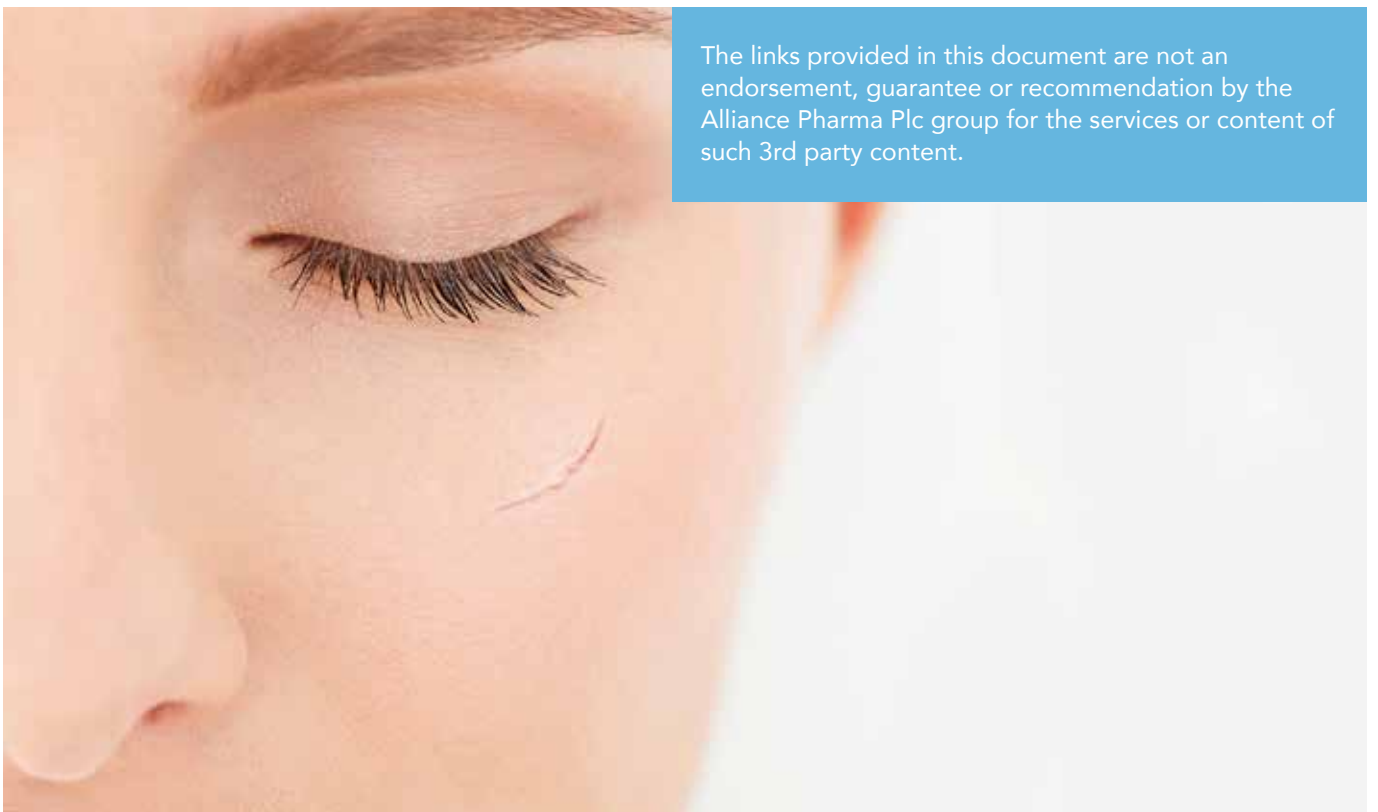
## Getting Help / Support Groups

There are many communities online who can support you in tough times.

[www.healthunlocked.com](http://www.healthunlocked.com) is a social media community for health, backed by the NHS.

Changing Faces supports and represents people who have conditions or injuries which affect their appearance. From improving confidence to championing equal opportunities, Changing Faces have always been at the forefront of supporting individuals and their families.

[www.changingfaces.org.uk/Home](http://www.changingfaces.org.uk/Home)



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## What treatments are available?

### Skin Camouflage

Changing Faces skin camouflage practitioners find the best colour match for each person's skin tone and then teach them how to apply the specialist cover products themselves. The products are fully waterproof and available on prescription from many GPs. But Changing Faces can't guarantee that your GP will give you a prescription.<sup>12</sup>

### Surgery

Surgery may improve the appearance of some types of scars and this will be a clinical decision. It can be used to change the positioning of the scar, change the width or shape of the scar and release a tight scar that is close to a joint, to improve movement.

Be aware that having surgery on your scar will leave a new scar that will take up to two years to improve in appearance. If surgery is used to treat a hypertrophic scar, there is a risk that the scarring may be worse after the surgery.

Surgery alone is not advised for keloids, as they may grow back larger. Surgery for keloids is often combined with corticosteroid injections at the site of the removed scar immediately after surgery. Some plastic surgeons also add other treatments, such as radiotherapy, to try to minimise the recurrence of a keloid that has been surgically treated. You can talk to your surgeon about this treatment.<sup>12</sup>



### Laser therapy

Laser or light therapy (pulses of light) can reduce the redness in a scar by targeting the blood vessels in the excess scar tissue. For some pitted scars, laser surgery (laser re-surfacing) is used to try to make the scar flatter. This involves using a laser to remove the top layers of skin, which stimulates collagen production in the deeper layers.

However, there are very few long-term studies to prove the effectiveness and safety of this therapy. If you have laser therapy, it's important to make sure that the person carrying it out is a fully trained medical practitioner with experience in improving scars.<sup>12</sup>

### Dermal fillers

Dermal fillers are injections (often of a man-made acid) used to "plump up" pitted scars. Treatments can be costly and the results are usually temporary. Repeat treatments are needed to maintain the effect.<sup>12</sup>

## KELO-COTE®

KELO-COTE® is a patented topical silicone gel for the easy and painless management and prevention of abnormal scars in the form of hypertrophic scars and keloids. It helps soften, flatten and smooth raised scars, both old and new, whilst maintaining the moisture balance and elasticity of the adjacent skin. KELO-COTE® also reduces discolouration, redness and associated itching, pain and discomfort of scars. It can also be used in conjunction with other treatment options such as pressure garments; cosmetics and sun protection can be applied once KELO-COTE® has dried. KELO-COTE® is available as a gel, a UV gel with SPF 30 and in a spray formulation that can be applied to the scar without rubbing or touching.



### How does KELO-COTE® work?

KELO-COTE®'s patented silicone scar gel dries within four to five minutes<sup>14</sup> of application forming a breathable, waterproof sheet over the affected area which acts like an extra layer of skin. This invisible silicone sheet binds the outer layer of dead skin cells to protect the underlying tissue against chemical, physical and microbial invasion of the scar. The silicone sheet also provides the optimal healing environment for scars by hydrating and protecting the scar area and allowing collagen production to normalise and improve the appearance of scars.

### What is the evidence to support KELO-COTE®?

KELO-COTE® is a topical scar product, with effectiveness demonstrated in over 10 published clinical studies. KELO-COTE® has been shown to help soften and flatten raised scars, and reduce redness or discolouration associated with them. This has been demonstrated on scars old and new. In an observational study of 1,522 patients using KELO-COTE® gel to treat scars, 98.2% rated the tolerability as "good" or "very good".<sup>15</sup>

### Benefits

- Transparent and odourless\*
- Easy and painless to apply
- Suitable for use on children
- Suitable for all types of scars both old and new, including scars arising from C-sections, cosmetic procedures, closed cuts/injuries, surgery and burns
- Easy and convenient with a twice daily application
- Suitable for use in conjunction with other treatment options such as pressure garments
- Available with or without a prescription

\*Gel and Spray products

## What is KELO-COTE® made of?

KELO-COTE® is a patented formulation, which is a precise blend of bio-inert and bio-compatible silicone compounds, namely polysiloxane, silicone dioxide and volatile silicone components which are suitable for use on children.

## How long will it take for a scar to improve?

When using KELO-COTE®, the recommended minimum treatment time is 60-90 days. Larger and older scars may take longer and continued use is recommended if improvement is still seen after the initial 90 days.

KELO-COTE® is available as a 100ml spray, a 6g and 15g UV gel and 6g, 15g and 60g gel.

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