

# Wound closure with sutures and surgical staples

## Why use sutures or surgical staples?

Sutures (commonly known as stitches) and surgical staples are used to hold the edges of a wound together as the body heals. When a doctor assesses your wound they will decide on the best method to repair the wound. Options include dressings, adhesive strips, glue, sutures and staples. The decision to use sutures or staples takes into account the wound's location, how large or deep it is, and whether it is subject to tension (e.g. a wound across a joint).

## Types of sutures/staples

### Interrupted suture

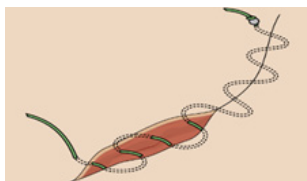
This is the most common suture type. They are inserted into the skin, and at times in deeper structures to bring tissue layers together. Glue or adhesive strips can be applied over the top of the sutures to reinforce the closure. Interrupted sutures are either:



1. Dissolving and will fall out on their own with time, or
2. Non-dissolving and will need to be removed

### Continuous suture

This is a single 'running' suture placed under the skin. It dissolves with time and does not need to be removed. The suture ends are sometimes initially left protruding from the ends of the wound, and are then cut off at the level of the skin after week or two when wound healing is established. Glue or adhesive strips can be applied over the top of the sutures to reinforce the closure.



### Staples

Staples are applied with a special applicator. They are also removed with a special device and are never left in.

## Will I have a scar?

All wounds leave a scar regardless of the method used to close them. At first, the scar may be red and thickish, then over the next six months it will become white, thin and smaller (sometimes almost invisible). The skin heals at different rates, depending on

factors such as the person's general health, age, diet and whether the wound becomes infected.

## The first week with sutures or staples

In the first few days after wound care the wound may be slightly red, tender or swollen; this is the same for all wounds. These symptoms should settle and resolve as the wound starts to heal. During this time, you may need some pain relief (such as paracetamol) and to rest the wound area when possible.

Keep the wound clean, dry, and covered for the first 3-5 days; this encourages the skin to join together and form a barrier. After this time, unless specified by the doctor, the dressing can be removed, the wound gently cleaned and a new dressing applied. Avoid swimming or soaking in the bath for seven days. Scalp wounds are commonly left undressed.

All wounds have a small risk of infection. If the wound begins to look more red, painful or discharge pus (as outlined below), then return to Cabrini ED for further care. When a wound is closed with stitches or staples there is a small risk of the wound re-opening, called dehiscence. Studies have shown this happens in 1-2% of wounds. If your wound does re-open please return to Cabrini ED for further wound management.

## Removal and optimising wound healing

In general, non-dissolving sutures are removed from the face after five days, and from other parts of the body at 10-14 days.

- Wounds increase in strength over a six week period post injury. After suture/staple removal, you may be advised to support the wound further with strips or medical tape for a further period of time particularly if the injury is over a joint, in an area prone to tension, or you are an active sports person.
- As the wound heals it is important to avoid early sun exposure as this will potentially darken the scar permanently. Use sunscreen on the wound over the sunny months for at least a year. If you are unhappy with your wound healing and how the scar appears please return to Cabrini ED to discuss options for further treatment.
- After one to two years, the wound will take on its final appearance. If you find it cosmetically unacceptable, there may be the option of 'scar revision'. This is undertaken by a plastic surgeon.

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### Follow up

Some wounds will need to be reviewed by a doctor. Your emergency doctor will let you know if this is necessary and when. If you have concerns at any time about your wound please return to Cabrini ED even if you do not have an appointment.

If becoming infected, signs usually start developing two to three days after the injury and may include:

- Increasing pain despite taking painkillers
- A warm, red, and swollen or painful wound or surrounding skin
- Pus (yellow or greenish discharge) or an offensive smell
- A tender lump in the groin or armpit
- Fever (temperature over 37.5°C in adults or 38°C in children) or flu-like symptoms
- The wound is not healing (after about five days)

### Seeking help

**Cabrini Emergency Department (ED)** is staffed by experienced emergency doctors and nurses 24 hours a day, 7 days per week. If you have any questions about your ED treatment our qualified ED staff can be contacted on **(03) 9508 1500** at any time. If you need to return to Cabrini ED for ongoing care we would be glad to take care of you again and if this occurs within a week of your initial consultation the doctor's fee will be bulk-billed.

You can also expect to receive a phone call or SMS message from one of our emergency nurses the day after you have been discharged. The nurse will be able to clarify any aspect of your diagnosis, treatment, or follow-up.

In a medical emergency return to Cabrini ED if it is safe to do so or go to the nearest hospital emergency department or call an ambulance – dial triple zero (000).

### Want to know more?

- Contact Cabrini ED on **(03) 9508 1500**
- Ask your local doctor or healthcare professional
- Visit the Better Health Channel at [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)