

# Surgical wounds –

## Preventing or speedily detecting infections

You are about to undergo surgery and you want to be well prepared? The medical staff is on hand to advise and assist you. But you can also do a great deal yourself to ensure that your surgical wound remains clean and heals well.

### How does a wound become infected?

Every surgical procedure leaves behind a wound that heals over time. A scar is formed.

Normally, our skin protects us from numerous germs. However, an open wound and the procedure itself are entry points for germs. They can open the door to infection of a wound. In Germany, wounds become infected every year in around 200,000 people who have undergone surgery. The term used by experts for this is *post-operative wound infection*. Roughly 1 in 100 surgical patients is affected. It is estimated that around one-third of these infections could be avoided by observing strict hygiene measures.

Wounds generally heal less well in people who are obese, anaemic or who have an immune deficiency, such as diabetes, HIV or cancer. They have an increased risk of wound infection.

### How to recognise an infected wound

After surgery, the surgical wound is usually closed with sutures, staples or clips. It is then covered with a sterile, that is germ-free, dressing. The wound is very vulnerable until it has closed completely. Until then, germs, especially bacteria, can easily get into the wound. The body responds to this with an infection to fight the germs. The following signs should alert you to an infection:

- the pain becomes more intense
- the skin around the wound becomes reddened
- the site becomes hot and swells up
- shivering and fever may occur
- pus (a yellowish liquid) is exuded, which may also smell

It is not always easy to determine whether the wound really is infected because every wound is usually slightly painful and red after the surgery anyway. In addition, it is covered with a dressing or plaster so that you often cannot even see it.

However, it is important to recognise and treat an infection as soon as possible. In a worst case scenario, the germs spread through your body and you become seriously ill. The medical term for an infection of the whole body is *sepsis*. Sepsis is life-threatening.



You and your medical team can do a great deal to prevent a surgical wound from becoming infected. It is particularly important to keep the wound clean, to dress it hygienically, to react to the first signs of infection and to then initiate treatment.

### This is how your medical team prevents infections

All doctors and nursing staff are trained to work in as sterile a manner as possible and to protect you from infection as best they can. A large number of measures complying with high hygiene standards, such as protective clothing, disinfection and gentle surgical techniques, contribute to this. If hair needs to be removed from the surgical area, it is usually trimmed with medical scissors or an electric hair clipper with a disposable clipping head (*clipper*). It is also possible to use a depilatory cream. However, this can irritate the skin. In addition, some people experience allergic reactions. In some cases, you will be prescribed antibiotics as a precaution, for example to prevent the surgical wound from becoming infected with bacteria.

After surgery, your wound will be covered with a sterile dressing. The dressing is usually changed for the first time after 48 hours. Once your wound is dry and closed, it may not be necessary to cover it again with a sterile dressing.

### At a glance



- A surgical wound can easily become effected with germs.
- The following signs indicate a wound is infected: increasing pain, the area becomes red, hot and swollen. Fever and a general feeling of discomfort are also possible.
- Careful hygiene can prevent many of these post-operative wound infections.
- Experts recommend, for example, showering before surgery, not shaving hair in the surgical area, keeping the dressing dry and clean, and attending medical check-ups.

## This is how your medical team prevents infections

After each surgical procedure, a doctor should regularly check the wound. After surgery, your medical team should explain to you exactly how to keep your wound hygienically clean and what you need to be on the lookout for.

## This is how you can help yourself

### Before surgery:

Germs that are already present on your skin are the ones that penetrate a wound the most frequently. Experts therefore recommend that you shower or wash your entire body thoroughly before a planned procedure. If time permits, it is best to do this on the day of the actual surgery, otherwise the evening before.

It is also important that you do not shave the areas of skin to be operated on, for example with a sharp blade. This can lead to minor injuries and increase the risk of infection. If hair needs to be removed, leave this to your medical team.

### After surgery:

You should always protect the wound from contamination and persistent wetness. When a wound is healing, it may itch unpleasantly. Nevertheless, you should leave the dressing alone as far as possible. Do not insert any thin objects under the dressing to scratch the wound either. The less you touch the wound, the cleaner it stays and the faster it heals.

Ask your medical team how and how often the wound should be checked after the procedure.

If you or your family members change the dressing or plaster in consultation with a doctor, you should always wash your hands thoroughly before and after, and disinfect them if necessary. It is best not to touch the wound with your hands. Clean disposable gloves are a useful option. Tie long hair in a plait. This prevents hair from getting into the wound too easily. It is also advisable to use a clean underlay, for example a fresh towel or a disposable pad, when changing the dressing.

A wound generally heals better if it is not subject to tension, pressure or traction. You should not, therefore, do any sport or lift anything heavy straight after surgery. However, it is usually possible and even advisable for you to go for walks and move around normally during everyday life. After checking with your doctor, you can usually resume endurance sports such as power walking, jogging, swimming or cycling around 2 to 3 weeks after the surgery.

## Other things you can do

- If you have any questions or are unsure how to care for your wound, talk to your doctor. Ask questions if there's something you haven't understood. Ask to be shown everything in detail if required.
- As a rule, you can take a shower 48 hours after the surgery as tap water in Germany is very clean and an initial protective film will have formed over the wound. You should not take a bath or visit a sauna until the wound has completely healed.
- Discuss everything with your medical team. If there are deviations from the general recommendations, ask for the reasons.
- Keep an eye on the wound and look out for any changes in the wound and your body. For example, the wound may ooze and the dressing may become soaked. This means the dressing has to be changed.
- Be on the lookout for signs of infection such as pain, redness and swelling. Signs of the onset of sepsis are a high temperature, rapid pulse and changes in consciousness. In the event of an emergency, call **112**.
- Some bacteria become resistant to antibiotics over time which means they are no longer effective. It is therefore important to use antibiotics very sparingly in everyday life and to take them exactly as directed by your doctor. More information on the topic of *antimicrobial resistance* at: [www.patienten-information.de](http://www.patienten-information.de).
- It is advisable that you attend your medical check-ups, for example, to change your dressing or remove your stitches. It is particularly important that you seek medical advice quickly if you are unsure or if the wound gets worse. Waiting is not an option here; quick action is needed.

## More information



### Sources, methodology and links

This information is primarily based on the "Recommendation of the Commission for Hospital Hygiene and Infection Prevention (KRINKO) at the Robert Koch Institute: Prevention of postoperative wound infections (2018)" and the experiences of those affected.

### Methodology and sources:

→ [www.patienten-information.de/kurzinformationen/operationswunde#methodik](http://www.patienten-information.de/kurzinformationen/operationswunde#methodik)

### Additional short information leaflets on health topics:

→ [www.patienten-information.de](http://www.patienten-information.de)



### Impressum

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