

by NLLIC Staff (Revised 2009)

After your surgery, attention will be focused on care of the wound and maintenance of the residual limb.

Any wound from amputation or other surgery is at risk of becoming infected because the skin opening can allow germs or dirt to enter the bloodstream. Infections can cause tenderness or pain, fever, redness, swelling and/or discharge. These infections can lead to further complications or surgery or even death if not treated properly.

While you are in the hospital, it is mainly the responsibility of the healthcare workers to care for your wound. Even so, the more you know about what is happening, the better you'll be prepared to take care of yourself once you leave the hospital.

You will always need to pay special attention to the hygiene of your residual limb (not only just after the surgery), because it will be enclosed in the socket or liner of your prosthesis and so will be more prone to skin breakdown and infections.

If you suspect you are getting an infection, do something! Act quickly, before a small irritation becomes a serious problem.

Take note that this advice also applies to wounds that may occur on the remaining limb or other areas of the body.

Remember: The best way to handle an infection is to *prevent* it by following these guidelines:

- Wash your residual limb with mild soap and water, then rinse and pat dry. Do this at least once a day, or more if you sweat a lot or are treating a rash or infection. Ask your pharmacist to recommend a nonperfumed, pH-balanced lotion.
- Wash anything that comes into contact with your skin (liners, socks, inner socket, etc.) with mild soap and water, then rinse and dry (check manufacturer's instructions).
- Do not use alcohol-based lotions on your skin, as it dries it out and can cause cracks, which can lead to infections.
- Use only enough softening lotion to avoid flaking, peeling dry skin. Ask your pharmacist to recommend a nonperfumed moisturizing lotion. Do not apply moisturizing lotion to the amputated limb immediately before applying prosthesis. The best time to apply lotion is at night before going to bed. It is important to prevent either excessive dryness or excessive humidity of the skin.
- Maintain a good prosthetic fit; learn how to adjust your sock ply, if applicable, or go for a prosthetic adjustment if you start to get redness over a pressure area. This will prevent the pressure area from becoming a pressure sore.

- Maintain correct alignment of your prosthesis by wearing the correct heel height that your prosthesis was aligned with and by maintaining a good socket fit.
- Eat a balanced diet and drink plenty of water (unless you have liquid intake restrictions) to maintain supple, healthy skin.
- If you have diabetes, monitor and maintain your glucose levels.
- If you have decreased sensation in your limb, remove your prosthesis several times per day to check for pressure areas.

The following complications may occur even if you take the above precautions:

- Red area that does not go away when prosthesis is off:
Treatment – check prosthetic fit before the red area becomes an abrasion.
- Blisters caused by pressure or shear (friction) between socket/liner and skin:
Treatment – check prosthetic fit, protect (do *not* burst) blister, and cover with very thin sterile dressing such as Telfa. If the blister has opened on its own, keep it clean and covered, and consult with a nurse for recommendation of the most appropriate treatment.

Bacterial infections (infected hair follicle, stitch abscess, infected pressure area, etc.) will have the following signs, ranked in order of severity, and should be treated by your physician:

- Area around the wound is warm/hot
- Area becomes red and swollen
- Pus or white/yellow drainage
- Red lines running up the extremity from the wound
- Sudden increase in pain
- Severe tenderness
- Fever.

Any of the following signs of infection require *emergency* attention to prevent it from spreading to your entire body and jeopardizing your life:

- Circulation decreases; the extremity feels cool/cold
- Wound or area smells bad
- Swollen glands in groin or armpits
- Wound has thick, brown/gray discharge
- Skin around the wound turns black or gangrenous.

If you are taking antibiotics, **always finish the prescription even if the infection seems to have cleared up.** Follow your physician's instructions carefully and maintain good hygiene for the following conditions:

- Allergic reaction: itchy rash.
Treatment – If the rash is mild, a topical antihistamine cream may help. Make sure liners, socks, etc. are rinsed after washing. Seek medical advice if it persists.
- Fungal infection: itchy burning rash similar to athlete's foot.
Treatment – Topical antifungal creams and/or diaper cream may work; if not, seek medical advice.
- Verrucous hyperplasia: thickened, red area on end of limb that becomes "warty" looking in later stages and can lead to systemic infection. This is caused by a vacuum between the residual limb and socket (lack of total contact creates a suction effect on the end of the limb).
Treatment – Check socket fit and seek medical advice to treat skin.

Reminders

- Removing the cause and treating the problem go hand-in-hand. If you have diabetes or peripheral vascular disease, it is imperative that you monitor your limb frequently and seek medical and prosthetic advice if you have an opening in the skin. If you catch a problem early and take care, you will often be able to continue to wear your prosthesis while healing.
- Swelling stretches the skin and makes it easier to break or tear. While the wound of your amputation surgery is still fresh, keep compression on your residual limb either by wrapping with an elastic bandage, wearing a shrinker, or wearing your Immediate Post-op or preliminary prosthesis; keep it elevated whenever possible. The limb should be raised above the level of your heart to prevent swelling.
- Take care of your whole self – body, mind, and spirit. Eat well and drink plenty of water to strengthen your body's natural healing capacity. Check your residual limb regularly for breakdown or signs of infection. When you see a sign of infection, even a small one, act quickly.

Input from Amputee Coalition of America Medical Advisory Committee: Recommendations by Natalie Fish, BSc (PT); Marthe Lemieux, nursing wound care specialist (Hôpital de réadaptation Gingras-Lindsay-de-Montréal; Pavillon Lindsay)