Managing Prosthetic Sock Ply

Information for the amputee on how to maintain an appropriate fit using proper sock ply.

Prosthetic Socks

You might wear prosthetic socks over your residual limb inside the socket of your prosthesis. These socks are often made of knitted nylon, cotton, &/or wool & are shaped to fit your residual limb. Prosthetic socks add cushioning, reduce friction between the residual limb & the socket, & replace lost volume in the socket due to shrinking of the residual limb. They are available in many sizes & thicknesses.

Throughout your life the size & shape of your residual limb will change. Your residual limb will shrink significantly after the swelling from the surgery goes down & as your muscles atrophy. After this initial shrinking occurs, your residual limb will continue to change more gradually as your body ages & gains & loses weight.

To maintain a proper fit of your prosthesis as your residual limb changes, you will add or remove prosthetic socks. Prosthetic sock thickness is rated in “plies.” You can add a thin sock over an existing sock or replace an existing sock with a thicker one. By counting sock plies you can add thickness in measured amounts. If you are wearing a prosthetic sock & the socket feels a little loose, you simply add more ply. You can do this by adding more socks or adding one thicker sock. For example, if you are wearing a 3-ply sock & you want the socket to fit a little tighter, you could add a 1-ply sock for a total of 4-ply. If this still feels a little loose, you may either add another 1-ply (for a total of 5-ply) or you could remove the 3-ply & both of the 1-ply socks & don (put on) a 5-ply sock. It is better to wear a thicker sock than many thin socks to avoid getting wrinkles in the sock. Wrinkles cause higher pressure in the area of the wrinkle & can rub on & injure skin.

Your prosthetist may give you socks of varying thicknesses so you can manage your socket fit. It is important to wear clean socks each day. Carefully follow the washing instructions that come with your prosthetic socks & keep the package or label from your socks so that when you need to replace your socks, you have a record of the type of socks you use.
The shoe is an important part of the prosthetic system due to its direct relationship with alignment. The prosthetic foot should fit snugly into the shoe, & the shoe should remain secure on the foot throughout the walking cycle. Shoes should always be chosen to fit your sound side foot comfortably. The artificial foot can be modified if the shoe doesn’t fit properly, but your sound side foot may be injured if a poorly fitted shoe is worn.

The heel height of the shoe is of particular importance, because changes in heel height will alter the alignment of the prosthesis & make walking more difficult. Therefore, it is very important for you to stay with the same heel height that the prosthesis was made for. If you need to change heel heights, let your prosthetist know, & he/she can discuss the pros & cons of a prosthesis designed for use with multiple heel heights.
Prosthetic Wearing Instructions

Care of the Residual Limb:
Your prosthetist will be provide you with a wearing schedule for your prosthesis. Be sure to examine your residual limb, daily, for areas of redness, irritation, or swelling. If these conditions persist, contact your prosthetist immediately. Pressure inside your socket is normal & can cause short-term redness that should disappear within 15 minutes. Contact your prosthetist if redness lasts for more than 15 minutes.

You must cleanse the residual limb, daily, with a mild soap & water. Be sure to thoroughly rinse off any soap residue & dry completely. Do not soak, as this can make the skin tender. The preferred time to cleanse your residual limb is in the evening. If cleansed in the morning, be sure to dry, completely, before putting on your prosthesis. Generally, lotions or creams are acceptable for use at night, but are not recommended for use in the morning prior to putting on your prosthesis. Never use lotion with silicone (gel) liners. A&D ointment may be used, if needed. Always check with your prosthetist on applying any product (s). Finally, shaving your residual limb can often cause irritation of the hair follicles. It is best not to shave the residual limb, but if necessary, exercise caution.

Shrinker:
When you are not wearing your prosthesis, you should be wearing your shrinker as instructed. This will help reduce limb volume fluctuations that can cause fitting problems. The shrinker should be pulled on so that there is no gapping at the end, no wrinkling, & no bunching at the top which could restrict blood flow. Also, keep the shrinker pulled above your knee. You will have to keep adjusting your shrinker throughout the day as it will tend to shift, & slip, eventually working its way off your residual limb.

Launder your shrinker using a mild soap & hang to dry. You should have two shrinkers so one if available while laundering the other. If your shrinker is not worn properly, problems can occur & cause problems in fitting your prosthesis. Make sure you contact your prosthetist if you have questions regarding how to wear your shrinker.

Socks:
It is extremely important that you learn to wear the appropriate sock ply(s). You will be instructed by your prosthetist as to how to make this determination. Wearing the wrong ply(s) of socks can lead to skin irritation &/or possible skin breakdown. Socks should be changed on a daily basis & laundered following directions on the package (different suppliers may have different care requirements). Your socks should fit snugly & be wrinkle-free. Any seams in the sock should be placed over soft tissue rather than bony areas.

Liners:
If you wear a gel liner, it is very important that you follow the wearing schedule given to you. Initially, your residual limb will need to be conditioned to wearing a silicone liner. The care of the liners vary depending on the manufacturer. Customarily, the silicone liner should be cleansed daily with a mild soap & water & rinsed completely. Soap residue can cause skin irritation. If a rash appears, you may not be washing or rinsing the liner thoroughly. Your residual limb may tend to perspire more with a gel liner. This is normal & usually, will lessen over time. Regularly inspect attachment points for signs of wear & tear & contact your prosthetist if the attachment looks worn. While wearing a gel liner, wear it fully above the knee & make certain there is no gapping between the end of the liner & your residual limb.
**Care of the Prosthesis:**
A prosthesis is a mechanical device & as such, requires regular maintenance & care. If you notice anything unusual (visual, audible, mechanical, or functional) it should be immediately inspected by the prosthetist. Your prosthesis should be inspected every six months by the prosthetist to ensure proper fit & function. Do not attempt to adjust screws or other parts of the prosthesis yourself. It is important that you follow up with your prosthetist, even if you are not experiencing problems.

You may clean the inside of the socket with a damp cloth. If there is a mechanical lock inside the prosthesis, make sure that water does not get down inside the prosthesis. The outside of the socket can be cleaned in a similar fashion. Cosmetic stockings can be cleaned in the same manner as your stump socks. If there is cosmetic skin covering the prosthesis, it may be cleaned with a mild soap & water.

**Purchasing Necessary Supplies & Products:**
Most patients need to keep a few items on hand, such as: **Socks, Liners, Shrinkers**, or **Sheaths**. You can make an appointment with a practitioner if you are unsure of what you need, or, you can call & place an order by phone.

If you have any questions, problems, or concerns, do not hesitate to call. Patient care is what we do best. We appreciate your patronage.