Below Knee Prosthesis

Suprapatellar Cuff and Waist Belt

General Description:

A suprapatellar cuff and waist belt suspends the prosthesis from around the waist. It is a very secure form of suspension and also allows some adjustability by the user. Some patients are able to achieve suspension with only the use of the cuff.

Application and Removal:

To apply the prosthesis, first a prosthetic sock is pulled onto the limb. The sock should be pulled up tightly without any wrinkles. Some patients may put on a nylon sheath first. The sheath helps to wick away moisture and reduce friction between the limb and the prosthesis. Secondly, the soft insert is pulled onto the limb. The limb is then pushed into the prosthetic socket. The cuff is then buckled around the knee and the waist belt is attached around the waist. The strap from the front of the cuff strap is then buckled to the waist belt. The attachment between the waist belt and the cuff strap must be tight enough to maintain suspension and prevent movement of the limb in the prosthetic socket while walking. Most patients wear the waist belt underneath the clothing.

To remove the prosthesis, unbuckle the waist belt and cuff, and lift the limb out of the socket.
Care and Maintenance:

The prosthetic socks and sheaths should be cleaned following that particular manufacturer’s directions. The soft insert and the prosthetic socket may be wiped out with warm, soapy water or alcohol as needed. Clean socks should be worn every day. When necessary, the waist belt can be hand washed in warm water and air-dried.

Tips and Problem Solving:

Generally, the most difficult concept for an amputee to master is how to determine the correct sock ply to wear. Wearing the correct amount of socks is critical for comfort as well as safety. Your prosthetist and physical therapist will supply you with general guidelines in wearing socks, but if you have any questions, do not hesitate to contact or visit your prosthetist.

For further troubleshooting, see BK Troubleshooting.