KOOTENAI
PROSTHETICS
& ORTHOTICS

New Amputee Handbook

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Glossary of Terms

- **AK Amputation:**
  - An abbreviation for "above-knee amputation," which involves removing the leg above the knee joint.
- **Ambulation:**
  - The medical term for walking or moving around.
- **BK Amputation:**
  - An abbreviation for "below-knee amputation," which involves removing the leg below the knee joint but above the ankle.
- **Contracture:**
  - A condition in which muscles, tendons, or other tissues shorten and tighten, limiting the range of motion in a joint. Contractures can develop due to prolonged inactivity or immobilization of a limb.
- **Donning/Doffing:**
  - The process of putting something on (donning) or taking something off (doffing).
- **Extension:**
  - The straightening of a limb or joint.
- **Flexion:**
  - The bending of a limb or joint.
- **Phantom Limb:**
  - The sensation that an amputated limb is still present and attached to the body. This phenomenon affects many amputees.
- **Phantom Limb Pain:**
  - A type of pain that feels like it's originating from the amputated limb, even though the limb is no longer present. This pain can range from mild to severe and may be described as burning, cramping, or shooting sensations.

Glossary of Terms (continued)

- **Ply:**
  - A unit of measurement used to describe the thickness of prosthetic socks. Socks with higher ply numbers are thicker and provide more cushioning and volume adjustment.
- **Prosthesis:**
  - An artificial device designed to replace a missing limb, such as an arm, leg, foot, or hand.
- **Prosthetic Liner:**
  - A soft, flexible interface worn between the residual limb and the prosthetic socket. Liners help protect the skin, provide cushioning, and aid in suspension of the prosthesis.
- **Prosthetic Socket:**
  - The custom-made, load-bearing component of a prosthesis that encases the residual limb and provides a secure and comfortable fit.
- **Range of Motion (ROM):**
  - The full extent of movement possible in a joint, typically measured in degrees.
- **Residual Limb:**
  - The portion of the limb remaining after amputation.
- **Residual Limb Care:**
  - The routine hygiene, skin care, and monitoring practices performed to maintain the health and integrity of the residual limb, which is crucial for successful prosthesis use.
- **Shrinker Socks:**
  - Compression garments worn on the residual limb to help shape and reduce swelling in preparation for prosthetic fitting.
- **Volume:**
  - The physical size of the residual limb. Fluctuations in residual limb volume can affect the fit and comfort of the prosthesis.

Introduction

Adjusting to life as an amputee can be challenging, both physically and emotionally. This guide aims to provide you with valuable information about the amputation process, rehabilitation, and adapting to life with a prosthesis while acknowledging the unique nature of your individual journey.

Losing a limb is life-altering, and it's normal to feel a range of emotions, including fear and uncertainty. However, life as an amputee can still be fulfilling and rewarding. By empowering you with knowledge, we hope to help you approach this new chapter with confidence and resilience.

This guide offers a general framework for the amputation and rehabilitation process, but it's crucial to keep in mind that every person's experience is unique. Factors such as the level of amputation, age, and overall health can all influence an individual's path to recovery. The timelines and milestones described here provide a general idea of what to expect, but it's normal for your experience to deviate from this to "typical" path.

Throughout your journey, you may encounter challenges and opportunities for growth. We'll provide realistic information about the benefits and limitations of prosthetic technology, emphasizing that while prosthetics can enhance your mobility and function, they are tools to help you achieve your goals, not solutions to every challenge. Focus on your personal goals and progress, rather than comparing yourself to others or striving for an unrealistic ideal. Progress is not always linear, and setbacks are normal. Celebrate your own milestones, no matter how big or small. Work with your healthcare team to develop a personalized plan that takes into account your unique needs and circumstances.

Use this guide as a starting point and a resource to empower yourself with knowledge and to guide discussions with your healthcare team. Remember, your resilience, determination, and progress are what truly matter.

You are not alone in this journey. By arming yourself with knowledge and surrounding yourself with a supportive network, you can navigate this new chapter with confidence. Your journey is unique, and your progress is a testament to your own strength and adaptability. Let's get started.

Preparing for Surgery

Deciding to proceed with an elective amputation is never easy, but there are many things you can do to prepare yourself mentally and physically for the surgery. Start by choosing a healthcare team that has experience working with amputees and understanding your specific needs. Research the type of amputation you'll be undergoing and don't hesitate to ask questions to ensure you have a clear understanding of the procedure and its implications.

In the weeks leading up to your surgery, focus on optimizing your physical health to promote better healing and recovery. If you smoke, quit or cut back as much as possible, smoking can impair circulation and slow down the healing process.

If you have diabetes, work closely with your doctor to manage your blood sugar levels, as uncontrolled diabetes can increase the risk of complications. Lastly, if you are overweight, losing even a few pounds before surgery can help reduce stress on your body and improve your overall recovery.

Of course, not all amputations can be planned in advance. In cases of severe trauma or life-threatening infections, you may need to undergo an amputation on an emergency basis to save your life. In these situations, following the usual pre-surgery preparation steps or assembling a full rehabilitation team beforehand may not be possible. If you've had an unplanned amputation, you may be just starting to assemble your rehabilitation team now. Rest assured that even in emergency cases, your medical team will work closely with you and your loved ones to provide the best possible care and support throughout the recovery process.

What to Bring to the Hospital

When packing for your hospital stay, consider bringing the following items to make your experience more comfortable:

- Comfortable, loose-fitting clothing: Pack several pairs of shorts or loose pants that are easy to put on and take off. Shorts, in particular, will make it easier for hospital staff to access your incision site for dressing changes and monitoring.
- Supportive shoes: Your non-amputated leg will likely be doing extra work during your recovery. So be sure to pack a pair of comfortable, supportive shoes to wear during physical therapy sessions and when moving around your hospital room.
- Personal care items: Don't forget to bring your toothbrush, toothpaste, deodorant, and other essential toiletries. If you have a preferred brand of soap or shampoo, pack those as well to maintain a sense of comfort and familiarity.
- Entertainment: To help pass the time during your hospital stay, consider bringing books, magazines, or a tablet loaded with your favorite movies or TV shows. Keeping your mind engaged can be a helpful distraction from discomfort and can promote a more positive outlook.
- Important documents: Make sure to bring your insurance card, a list of your current medications, and any relevant medical records that your healthcare team may need to reference during your stay.

Your hospital stay is just the beginning of your journey. By being well-prepared and focusing on your recovery, you'll be taking important steps towards adapting to life as an amputee and regaining your independence.

Levels of Amputation

The level at which an amputation is performed depends on various factors, including the extent of the injury or disease, the patient's overall health, and the goal of maximizing functionality and mobility. Your surgeon will carefully consider these factors when determining the most appropriate level for your amputation, with the aim of preserving as much of the limb as possible while ensuring the best possible outcome for you.

Partial Foot Amputation

A partial foot amputation involves removing one or more toes, the forefoot (trans metatarsal), or the midfoot (Lisfranc). This level of amputation reduces the foot's ability to provide balance and forward propulsion during walking.

- Prosthetic Options:
  - Patients may be fitted with a "toe filler" (a molded foam insert) to prevent the foot from sliding forward in the shoe. Depending on the foot's length, a semi-rigid carbon insert or an ankle encompassing brace may be used to provide leverage and support.
- Considerations:
  - Partial foot amputations preserve the heel pad and ankle joint, allowing for a more natural walking mechanics. However, the reduced foot length can make it challenging to maintain balance and propel the body forward.

Syme's Amputation

A Syme's amputation is an ankle disarticulation, where the foot is removed but the lower leg bones (tibia and fibula) are preserved

- Prosthetic Options:
  - This level of amputation is treated similarly to a below knee amputation, with a prosthetic foot and socket designed to accommodate the longer residual limb.
- Considerations:
  - Patients with a Syme's amputation often have a larger weight bearing surface area and a longer lever arm to control the prosthesis. The bulbous shape of the residual limb can make fitting a prosthesis more challenging.

Below- Knee (Transtibial) Amputation

A below-knee amputation, also known as a transtibial amputation, is the most common level of amputation in the lower extremity.

- Prosthetic Options:
  - The prosthetic socket encapsulates the residual limb below the knee, allowing for full range of motion at knee joint. A prosthetic foot is attached to the socket.
  - Considerations: Preserving the knee joint allows for more natural gait mechanics and greater control over the prosthesis. A shorter residual limb may have less leverage to control the prosthetic the prosthetic foot.

Above- Knee (Transfemoral) Amputation

An above-knee amputation, also called a transfemoral amputation, involves removing the leg above the knee joint.

- Prosthetic Options:
  - The prosthetic socket encapsulates the residual limb and extends up to the pelvis. A prosthetic knee joint and foot are attached to the socket.
- Considerations:
  - A longer residual limb provides better control over the prosthesis and allows for more natural sitting and standing positions. Learning to control the prosthetic knee joint may require additional training and practice.

Knee Disarticulation

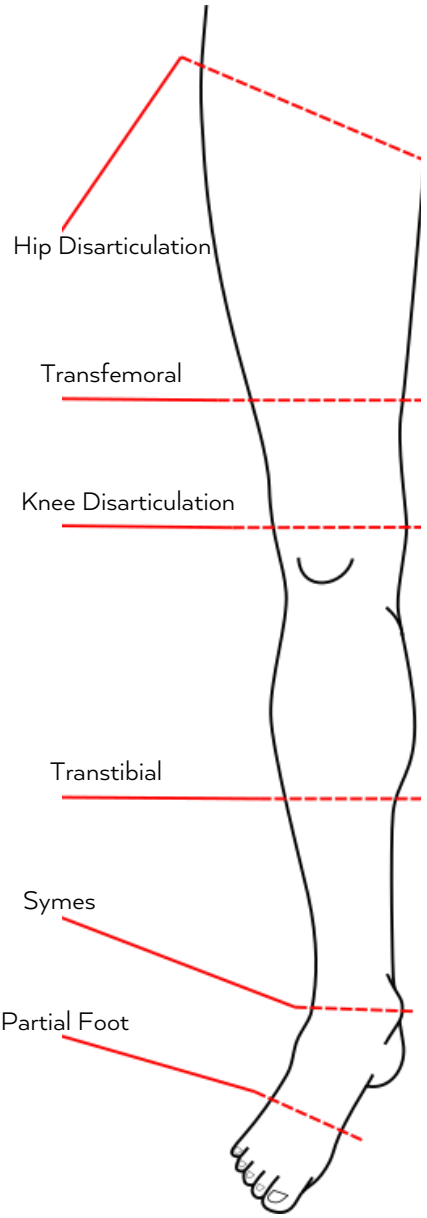
A knee disarticulation, also known as a "through-knee" amputation, involves removing the lower leg at the knee joint while preserving the femur.

- Prosthetic Options:
  - The prosthetic socket encapsulates the residual limb and extends up to the thigh with a prosthetic knee joint and foot attached.
- Considerations:
  - The longer residual limb allows for better control over the prosthesis, and some weight-bearing can be achieved on the end of the limb. The bulbous shape of the residual limb can make fitting a prosthesis more challenging.

Hip Disarticulation and Hemipelvectomy

A hip disarticulation involves removing the entire lower limb at the hip joint, while a hemipelvectomy also removes a portion of the pelvis.

- Prosthetic Options:
  - The prosthetic socket encapsulates the residual limb and pelvis, with a prosthetic hip joint, knee joint, and foot attached.
- Considerations:
  - Advances in prosthetic joint technology have improved stability and gait for patients with these high-level amputations. The increased energy expenditure required for walking with a hip disarticulation or hemipelvectomy prosthesis can be challenging for some patients.



Remember, your surgical team will work closely with you to determine the most appropriate amputation level based on your individual needs and medical circumstances. Once the amputation is performed, your prosthetist will collaborate with you to design and fit the best prosthetic options for your specific amputation level and personal goals.

What to Expect After Amputation

The post-operative care and rehabilitation process after an amputation can vary depending on your individual circumstances, overall health, and the level of amputation. While the following timeline provides a general overview of what you can expect, keep in mind that every person's journey is unique, and your progress may differ from this outline.

Immediately After Surgery

- Your surgical team will manage your pain and monitor your vital signs.
- You may have a drain near the incision site to remove excess fluid.
- Your residual limb will be wrapped in a dressing to protect the incision and control swelling.

First Few Days After Surgery

- Pain management will continue, and you'll be encouraged to start moving around as soon as possible.
- Physical therapy will begin with gentle range-of-motion exercises and muscle strengthening.
- You may be fitted with a device like a post-amputation limb guard to protect your limb and help prevent contracture.

First Few Weeks After Surgery

- Your care team will closely monitor your wound healing and change your dressings as needed.
- You'll continue with physical therapy to maintain strength, flexibility, and range of motion in your residual limb and surrounding joints.
- You may start learning how to transfer safely between your bed, a chair, and other surfaces.

4-8 Weeks After Surgery (Timing Varies)

- Your incision should be healed, and your sutures or staples will be removed. This is a prerequisite for starting the prosthetic fitting process.
- Once your incision is healed, your prosthetist will begin compression therapy, which typically involves wearing a shrinker sock for 1-2 weeks to help shape your residual limb and prepare it for prosthetic fitting.
- You'll continue with physical therapy to prepare for prosthetic fitting.

8+ Weeks After Surgery (Timing Varies)

- After your residual limb has been properly shaped through compression therapy, your prosthetist will make a cast of your limb to create a diagnostic socket.
- You'll be fitted with a diagnostic prosthesis, which will allow your prosthetist to assess the fit and make any necessary adjustments.
- The diagnostic prosthesis will be iteratively adjusted, and you will be encouraged to wear it in your regular life to discover an issues that didn't show up in the clinic fitting. This process may take several visits over few weeks.
- Once the fit is finalized, your custom prosthesis will be fabricated.
- You'll receive your custom prosthesis and begin learning how to use it in physical therapy.
- Your rehab team will work with you to gradually increase your wearing time and help you adapt to your new prosthesis.
- You'll continue with exercises to improve your strength, balance, and coordination.

Remember that the timeline for prosthetic fitting can vary widely depending on factors such as your healing progress, residual limb volume changes, and individual needs. Your prosthetist and rehab team will work closely with you to ensure that you're ready for each step of the process and that your prosthesis is fitted and adjusted optimally for your unique situation.

Throughout the recovery process, it's essential to communicate openly with your care team about any concerns, questions, or challenges you may be facing. Your physical therapist will work with you to develop a personalized rehabilitation plan that considers your specific needs, goals, and progress.

Don't forget that the emotional and psychological aspects of recovery are just as significant as the physical aspects. Surround yourself with a strong support system of family, friends, and healthcare professionals who can provide encouragement, understanding, and guidance as you navigate this new chapter in your life. Don't hesitate to reach out for additional support, such as counseling or peer support groups.

With dedication, patience, and a positive outlook, you can successfully adapt to life after amputation and regain your mobility and independence.

Maintaining Residual Limb Health

Proper care of your residual limb is crucial for successful prosthetic use and overall well-being. This involves maintaining good hygiene, caring for your skin, desensitizing your limb, and managing scar tissue.

Hygiene and Skin Care

- Wash your residual limb daily with mild soap and warm water, paying special attention to skin folds or creases.
- Dry your limb thoroughly, especially before donning your prosthesis, to prevent skin irritation and infection.
- Check your skin daily for redness, blisters, or open sores. Contact your prosthetist or physician if you notice any issues.

Desensitization Techniques

After amputation, your residual limb may be sensitive to touch and pressure. Desensitization techniques can help you gradually adapt to these sensations.

- Gently touch or tap your limb with your fingertips, working from less sensitive areas towards more sensitive areas.
- Progress to using different textures, such as a soft cloth or a brush.
- Apply gentle pressure to your limb, gradually increasing pressure as your tolerance improves.

Scar Massage

Massaging your scar tissue can help improve its flexibility, reduce adhesions, and desensitize the area.

- Wait until your incision is fully healed before beginning scar massage.
- Apply gentle pressure to your scar using your fingertips or palm, moving in a circular or back-and-forth motion.

Scar Massage (continued)

- Gradually increase pressure and duration as your tolerance improves.

Preventing Contractures

Contractures occur when muscles and soft tissues shorten and tighten, limiting joint mobility. Preventing contractures is essential for maintaining the range of motion needed for successful prosthetic use.

- Contractures can develop from prolonged positioning of your limb in a flexed or bent position, such as sitting in a wheelchair or lying in bed for extended periods.
- To prevent contractures, maintain proper posture and alignment by regularly changing positions, using supportive pillows or wedges, and avoiding prolonged periods of inactivity.
- Engage in range of motion exercises as directed by your physical therapist. These exercises may include gentle stretching, active and passive movement of your joints, and the use of splints or braces.
- For below-knee amputations, focus on keeping your knee extended and avoiding prolonged periods of knee flexion.
- For above-knee amputations, pay attention to your hip position, avoiding excessive flexion and abduction (outward rotation) of your hip.

Preventing contractures is an ongoing process that requires diligence and consistency. Work closely with your physical therapist to develop a personalized plan for maintaining your joint mobility and flexibility.

Setting Realistic Goals

Setting realistic goals is an essential part of the rehabilitation process. It helps you stay motivated, track your progress, and adjust your expectations as needed.

- Start by discussing your short-term and long-term goals with your rehab team. These may include goals related to mobility, self-care, work, leisure activities, and overall quality of life.
- Break down larger goals into smaller, achievable milestones. For example, if your long-term goal is to walk independently, your short-term goals might include standing with support taking a few steps with a walker, and gradually increasing your walking distance.
- Be specific and measurable when setting goals. Instead of saying, "I want to walk better," say, "I want to walk 100 feet with my prosthesis and only one rest break."
- Regularly review your goals with your rehab team and adjust them as needed based on your progress and any challenges you encounter.
- Celebrate your achievements, no matter how small they may seem. Recognizing your progress can help you stay motivated and committed to your rehabilitation journey.

Remember, every person's rehabilitation journey is unique. Don't compare yourself to others or feel discouraged if your progress seems slow. Stay focused on your own goals, and trust that with hard work and perseverance, you will achieve them.

Anatomy of a Prosthesis

A prosthesis is an artificial device designed to replace a missing limb. While the specific components may vary depending on the level of amputation and the user's individual needs, most prostheses share some common elements.

Socket

The socket is the part of the prosthesis that fits over the residual limb. It is custom- made to ensure a comfortable and secure fit, which is essential for successful prosthetic use.

- The socket is typically made from a lightweight, durable material such as carbon fiber or thermoplastic.
- It is designed to distribute the user's weight evenly across the residual limb and provide stability during movement.
- A well-fitting socket should be snug but not too tight, allowing for some movement of the residual limb without causing discomfort or skin irritation.

Suspension System

The suspension system is responsible for keeping the prosthesis securely attached to the residual limb. Common types include:

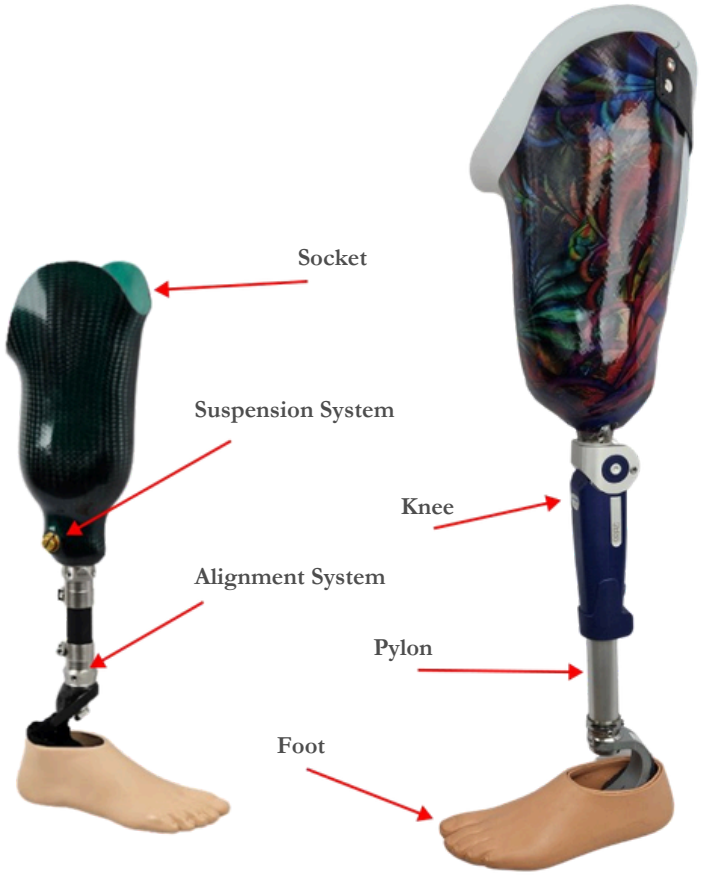
- Pin Lock suspension: The most common and popular suspension method, which uses a pin attached to the liner that locks into a mechanism in the socket.
- Suction suspension: Uses a one-way valve to create a vacuum between the socket and the residual limb.
- Vacuum suspension: Uses an active vacuum pump to maintain a constant vacuum between the socket and the residual limb.
- Sleeve suspension: An elastic sleeve that secures the prosthesis with friction.

Pylon

The pylon is a strong, lightweight component of your prosthesis that connects the socket to your prosthetic foot. Its main job is to provide a stable link between these parts and to help set the correct height of your prosthesis. The pylon is an essential part of every prosthetic leg, and it is usually made from durable materials like aluminum.

Alignment System

The alignment system is made up of adjustable components that allow your prosthetist to fine-tune the position of your prosthetic foot and socket. These components can change the angle and position of your prosthetic parts in relation to each other, which is important because the way these parts are aligned can have a big impact on how comfortable and easy it is for you to walk and move with your prosthesis. By making small adjustments, your prosthetist can ensure that your prosthesis is properly aligned to your body and movement patterns, which is crucial for achieving the best possible fit, function, and comfort.



Prosthetic Knee (for above-knee amputations)

For individuals with above-knee amputations, the prosthesis will also include a prosthetic knee joint. The knee joint is designed to mimic the function of a human knee, allowing for bending and straightening of the leg during walking. There are several types of prosthetic knees available, including single-axis knees, polycentric knees, and microprocessor controlled knees. The choice of prosthetic knee is determined in cooperation with your prosthetist, taking into account your lifestyle requirements, medical necessity, and personal goals. Your prosthetist will work with you to select a knee that best supports your desired activities and level of function.

Prosthetic Foot

The prosthetic foot is designed to replicate the function of a human foot, providing stability, shock absorption, and push-off during walking. There are many different types of prosthetic feet available, ranging from simple solid ankle cushion heel (SACH) feet to more advanced energy-storing feet that use carbon fiber springs to provide a more natural gait. The choice of prosthetic foot is determined in cooperation with your prosthetist, taking into account your lifestyle requirements, medical necessity, and personal goals. Your prosthetist will work with you to select a foot that best supports your desired activities and level of function.

The Process

Initial Evaluation

Your practitioner will begin by obtaining a detailed health history and evaluating your extremities. This includes:

- Checking your range of motion
- Assessing your strength

Examining your incision site and sound side (the non-amputated limb)

Your prosthetist will also discuss your pre surgery activity level, future goals, and progress in therapy. Take time before your appointment to think seriously about what activities are important to you, such as dancing or standing at the stove to cook dinner.

Casting Process

Your practitioner will cast your residual limb using one of the following methods:

1. Plaster cast
2. Fiberglass cast
3. Digital image using a CAD system

The cast will be removed immediately, and the prosthetist will use it to create an image of your leg to fabricate your socket.

Diagnostic Check Socket

Within a week, you'll be scheduled for an appointment to fit your diagnostic check socket (DCS). The DCS is a clear plastic version of your final socket, molded to your residual limb. Your prosthetist will take several measurements for a gel liner to wear between your limb and the leg. A prosthetic foot and other components will be mounted to the DCS, allowing you to stand and walk while your prosthetist visualizes the pressure in the socket and ensures a proper fit.

It's crucial to communicate openly with your prosthetist about any pain, feelings of insecurity, or other problems you experience while bearing weight through the leg. If you've been recovering well since surgery, you may be surprised at how quickly you begin taking steps and gaining confidence.

You may leave your prosthetist's office with a DCS to wear for short periods at home and during therapy. This helps you become comfortable wearing your prosthesis and identify any comfort issues. If you notice areas of bright redness or skin breakdown, discontinue use until you can see your prosthetist.

Adjustments and Alignment

As the shape of your limb changes rapidly, frequent visits to your prosthetist are expected. While walking, you may notice problems with the alignment of the prosthesis. The leg will be as stable and safe as possible, but as you become a more proficient walker, adjustments may be needed to keep up with your progress. These adjustments are easy to make, so don't hesitate to ask for changes.

Common problems include:

- Feeling unsteady
- Foot pointing inward or outward
- Sensation of walking uphill or down hill

As you gain experience with your prosthesis, it will become easier to communicate the changes you need. For now, describe the feeling as best you can and don't be discouraged if it takes a few attempts to get it just right.

Once your leg is comfortable and well aligned, you'll have a "transfer" appointment. Your prosthetist will take your prosthetic leg for about an hour to duplicate the socket and alignment to create your definitive preparatory leg, which will be delivered in about one week.

Remember, open communication with your prosthetist is key to ensuring a comfortable and well fitting prosthesis that meets your individual needs.

Wearing a Gel Liner

Most amputees use a gel or silicone liner as part of their prosthetic system. A gel liner is a soft, cushioned interface worn between your residual limb and the prosthetic socket, designed to protect your skin, improve comfort, and enhance suspension and control.

Donning a Gel Liner

Proper donning technique is crucial for a comfortable and secure fit:

1. Turn the clean liner inside out and place the bottom end against the end of your residual limb.
2. If your liner has a locking pin, ensure it's correctly aligned.
3. Slowly roll the liner up over your limb, smoothing out any wrinkles or air pockets between your skin and the liner.






Caring for Your Gel Liner

Proper care is essential for hygiene, skin health, and liner longevity:

- Wash your liner daily with mild soap and warm water, then rinse thoroughly.
- Turn the liner fabric side out and allow it to air dry completely before wearing.
- Never dry the liner gel-side out, as this will cause damage to the gel.
- Rotate between two liners to allow sufficient drying time.
- Inspect your liner regularly for signs of wear or damage and consult your prosthetist if you notice any issues.

Adjusting for Volume

Volume changes in your residual limb are normal and expected, especially in the first few months after amputation. These changes can be influenced by factors such as time of day, activity level, diet, and overall health. Even after the initial period of rapid change, you may notice that the volume of your limb fluctuates. This is where prosthetic fitting socks come in.

Prosthetic fitting socks, which are different from your shrinker socks, are worn inside your prosthetic socket to maintain a snug fit as your limb volume changes. These socks come in different thicknesses, referred to as "ply." The most common thicknesses are 1, 3, and 5 ply. It's important to communicate with your prosthetist about the number of ply you wear throughout the day, as this information can help determine when you may need a new socket.

So, when should you add a sock? If your socket becomes uncomfortable, especially if you feel increased pressure on the end of your residual limb, it's time to add a sock. This discomfort occurs because as your limb volume decreases, your residual limb sinks further into the socket, and the pressure distribution changes. Experiment with different sock thicknesses until you find a combination that allows you to feel comfortable and supported, without excessive pressure on the end of your limb.

Keep in mind that it's also possible to add too many socks in an attempt to compensate for volume loss. If you find yourself adding multiple socks or using very thick socks, your socket may start to fit lower on your leg than usual. This is a sign that the socket fit is being compromised by the extra socks. In this case, it's best to consult your prosthetist, as you may need a new socket to accommodate your changed limb volume.

Figuring out the right sock thickness can take some trial and error, and you may need to adjust your socks several times throughout the day. Be patient with yourself as you learn to recognize when and how much to adjust your socks. With time and practice, you'll develop a good sense of how your limb volume fluctuates and what sock combinations work best for you. If you have any questions or concerns about adjusting your socks or your changing limb volume, don't hesitate to reach out to your prosthetist. They are there to help you achieve the most comfortable and functional fit possible.

Common Issues

The Sound Side

Overuse of the unamputated limb can lead to problems for long-term prosthetic users, such as the need for future amputation. To minimize or prevent these problems, it is important to wear sensible shoes, check your skin for breakdown and infection, and use your prosthetic side as much as possible.

Phantom Limbs and Phantom Pain

It is common for amputees to experience phantom limb sensations, including itchiness or twitching in the area where the amputated limb used to be. These sensations vary widely and may be temporary or persistent. They are caused by the brain's attempt to adapt to the loss of the limb and can be managed with medication, physical therapy, and other therapies. Phantom limb sensations usually dissipate when the patient begins wearing a prosthesis or compression garments. Consult your medical team for more information and help finding the right solution.

Falls

Falls can occur during rehabilitation for new amputees due to the brain still expecting the amputated limb to be present, and changes in weight distribution causing imbalance. To minimize the risk of falls, take your time adjusting to the amputation and protect the residual limb. Your therapist will teach you safe falling strategies, which can help you stay focused on your rehabilitation if falls do occur. It's also very important to wear your limb guard. If you should happen to fall, this can greatly reduce the risk of injury and further setback in your recovery.

Issues With Healing

Healing times can vary depending on factors such as age, diabetes, and smoking. To reduce the risk of infection and extend healing times, keep the limb clean and avoid touching the incision area. If you have diabetes, it is important to manage your blood sugar levels and diabetes to help minimize the risk of extended healing times.

Pain

Tenderness around the incision site is normal and should decrease quickly as you heal. It is normal to feel protective of your limb and some patients find it difficult to put on dressings. Once you begin wearing compression socks, the volume will be reduced, and pain should decrease. Talk to your doctor if you feel your pain is unmanageable.

When To See Your Prosthetist

Your prosthetist is your partner in ensuring the best possible outcomes for your recovery and rehabilitation. Maintaining open communication and attending regular check-ins are essential for addressing any issues promptly and preventing potential complications.

Initial Months:

In the first few months after receiving your prosthesis, you'll likely see your prosthetist once a week or every other week.

These visits are crucial for monitoring your adaptation to the prosthesis, ensuring proper fit, and making necessary adjustments.

As you become more comfortable with your prosthesis, the frequency of your appointments will gradually decrease.

Routine Check-Ins:

Schedule regular appointments with your prosthetist every 6 months, even if you aren't experiencing problems.
These check-ins allow your prosthetist to monitor the fit of your prosthesis, assess your skin health, and make necessary adjustments for optimal comfort and function.

Red Flags:

Contact your prosthetist immediately if you experience:

- Persistent skin redness, sores, or blisters that do not heal
- Unusual or sudden increase in pain or discomfort
- Significant changes in the fit of your prosthesis
- Clicking noises, cracks, breaks, or other damage to your prosthesis
- Any concerns affecting your ability to wear or use your prosthesis safely

Communicating Changes:

Keep track of changes in the fit of your prosthesis or the volume of your residual limb. Contact your prosthetist if you notice persistent or significant changes, such as needing to add many socks or feeling discomfort.

What to Expect During a Problem Focused Appointment:

Your prosthetist will assess the fit and function of your prosthesis and the health of your residual limb.

- They may adjust your prosthesis, such as changing the alignment or modifying the socket.
- Your prosthetist may collaborate with other healthcare team members to address specific concerns.
- You'll have the opportunity to discuss challenges and develop a plan to address them.

Remember, your prosthetist is your ally and resource throughout your journey. They are dedicated to helping you achieve your goals and regain your mobility and independence. By maintaining open communication and attending regular check-ins, you'll be better equipped to navigate any challenges and ensure a successful recovery.

Frequently Asked Questions

General Questions:

How long does it typically take to adjust to using a prosthesis?

- The adjustment period varies from person to person, but most amputees can expect to feel more comfortable and confident with their prosthesis within a few months of consistent use.
- Factors such as your overall health, level of amputation, and adherence to your rehabilitation plan can influence the adjustment process.
- Be patient with yourself and celebrate small victories along the way. With time and practice, using your prosthesis will become more natural and intuitive.

Can I swim or take a bath with my prosthesis?

- Most prostheses are not designed to be submerged in water, as moisture can damage the components and compromise the fit.
- When bathing or showering, it's generally recommended to remove your prosthesis and cover your residual limb with a waterproof cover to keep it dry.

How often should I see my prosthetist for check-ups?

- In the first few months after receiving your prosthesis, you'll likely see your prosthetist once a week or every other week to monitor your progress and make any necessary adjustments.
- As you become more comfortable with your prosthesis and your limb volume stabilizes, the frequency of your appointments will gradually decrease to every 3-6 months for routine check-ins.
- However, if you experience any issues or concerns with your prosthesis, such as skin irritation, pain, or changes in fit, schedule an appointment with your prosthetist as soon as possible.

Prosthesis Care and Maintenance:

How do I clean and maintain my prosthesis?

- If you wear a gel liner, it's crucial to clean it daily with mild soap and warm water, and dry it thoroughly to prevent bacterial growth and odors.
- The prosthetic socket and exterior should be wiped down with a damp cloth when they become visibly dirty. Avoid using harsh chemicals or abrasive materials that could damage the surface.
- Regularly inspect your prosthesis for signs of cracks, loose components, or worn-out liners or socks. Report any concerns to your prosthetist promptly.
- Follow your prosthetist's guidance on the proper care and maintenance of your specific prosthetic device.

What should I do if my prosthesis makes squeaking or clicking noises?

Some common causes of squeaking or clicking noises include:

- Squeaking due to not having a sock over the prosthetic foot.
- Clicking sounds caused by keys in a pocket hitting against the socket or clicking in time with your steps.
- If you suspect one of these simple causes, try addressing the issue by putting a sock over the prosthetic foot or removing keys from your pockets.
- For any other unexplained noises or if the problem persists, schedule an appointment with your prosthetist. They can properly inspect your prosthesis, identify the cause of the noise, and make any necessary adjustments or repairs.

How often should I replace my prosthetic liners or socks?

- The lifespan of prosthetic liners and socks varies depending on factors such as usage, care, and individual wear patterns.
- On average, prosthetic liners should be replaced every 6-12 months, or sooner if you notice signs of excessive wear, tears, or loss of elasticity.

- Prosthetic socks should be replaced when they become worn, stretched out, or no longer provide the desired fit and comfort.
- Consult with your prosthetist for guidance on when to replace your liners and socks based on your specific needs and usage habits.

Managing Discomfort and Skin Issues:

How can I manage pain or discomfort associated with prosthesis use?

- Some discomfort is normal as you adjust to using your prosthesis, but persistent or severe pain may indicate an underlying issue that needs attention.
- Check your skin regularly for signs of irritation, redness, or blisters. These can be caused by poor fit, friction, or excessive pressure from your prosthesis.
- Adjust your sock ply or liner as needed to achieve a comfortable, snug fit without excessive pressure on your residual limb.
- If pain persists or worsens despite adjustments, schedule an appointment with your prosthetist to assess the fit and alignment of your prosthesis.
- In some cases, your prosthetist may recommend additional strategies, such as using a different type of liner, adjusting your gait, or incorporating pain management techniques into your daily routine.

What should I do if I develop skin irritation or a rash on my residual limb?

- Skin irritation and rashes can occur due to a variety of factors, including poor hygiene, excessive sweating, or an ill-fitting prosthesis.
- Wash your residual limb daily with mild soap and warm water and dry it thoroughly before donning your prosthesis.
- Make sure your liners and socks are clean and dry, and rotate them regularly to prevent bacterial growth.
- If you notice persistent redness, itching, or a rash, contact your prosthetist or dermatologist for guidance. They may recommend topical treatments, adjustments to your prosthesis, or other interventions to address the issue.

Lifestyle and Support:

Can I return to my favorite activities and sports with a prosthesis?

- Yes, many amputees can return to the activities and sports they enjoyed before their amputation, often with the help of specialized prosthetic devices and adaptations.

Can I use lotion or powder on my residual limb?

- In general, it's best to avoid using lotions or powders on your residual limb, as they can interfere with the fit of your prosthesis and contribute to skin irritation.
- If your skin feels dry or itchy, consult with your prosthetist or dermatologist for recommendations on appropriate moisturizers that won't compromise the fit or function of your prosthesis.
- Some amputees find that using a thin, moisture-wicking liner or prosthetic sheath can help manage perspiration and reduce friction between their skin and the prosthetic socket.

- Discuss your goals and interests with your prosthetist, who can work with you to design a prosthesis that meets your specific needs and helps you achieve your desired level of activity.
- Keep in mind that it may take time and practice to regain your skills and confidence in certain activities. Be patient with yourself and focus on progress rather than perfection.

- Seek adaptive sports programs, clubs, or organizations that cater to amputees and individuals with disabilities. These can be great resources for finding support, guidance, and inspiration as you pursue your favorite activities.

How can I find peer support or connect with other amputees?

- Connecting with other amputees can be a valuable source of support, encouragement, and practical advice as you navigate life with limb loss.
- Ask your prosthetist or healthcare team if they can recommend any local amputee support groups or peer mentorship programs.
- Seek out online forums, social media groups, or websites dedicated to amputee support and advocacy. These can be great places to share experiences, ask questions, and learn from others who have been in similar situations.
- Consider attending amputee-specific events, such as conferences, workshops, or adaptive sports clinics. These can be excellent opportunities to meet other amputees, learn about the latest prosthetic technologies and resources, and build a sense of community.

Are there any financial assistance programs available for prosthetic devices or related expenses?

- The cost of prosthetic devices and related expenses can be a significant financial burden for many amputees. However, there are various financial assistance programs and resources available to help offset these costs.
- Check with your health insurance provider to understand your coverage for prosthetic devices and related services. Prosthetic devices are usually categorized as durable medical equipment (DME) and may be subject to different coverage rules and requirements than standard medical visits or procedures.

- Be aware that insurance coverage for prosthetic devices can vary widely depending on your specific plan and provider. Some plans may cover a portion of the costs, while others may have higher deductibles, copayments, or coinsurance rates for DME.
- Investigate government programs, such as Medicare, Medicaid, or Veterans Affairs (VA) benefits, which may provide coverage for prosthetic devices and rehabilitation services if you meet certain eligibility criteria.
- Explore non-profit organizations and charities that offer financial assistance, grants, or low-interest loans to amputees for prosthetic devices and related expenses. Some examples include the Amputee Coalition, the Limbs for Life Foundation, and the Challenged Athletes Foundation.
- Consult with a social worker for guidance on navigating the various financial assistance options available to you based on your individual circumstances and needs. They can help you understand your insurance coverage, identify potential funding sources, and assist with the application process for grants or other financial aid programs.

Resources and Support

Academy of Nutrition and Dietetics • Author: Roberta Larson Duyff • Amazon, Barnes & Noble www.eatright.org	Adaptive Driving Alliance • Nationwide group of wheelchair accessible vehicle dealers www.adamobility.com	American Association of People with Disabilities • National disability-led rights organization www.aapd.com
American Diabetes Association • Diabetes related updates • Healthy living • Resources for Type 1 & 2 www.diabetes.org	American Heart Association • Heart Attack & Stroke Symptoms • CPR information www.heart.org	Amputee Coalition • National Limb Loss Resource Center • Limb loss Support groups • Health Care Navigator www.amputee-coalition.org
Breakthrough T1D • Information and tools to help with challenges of T1D www.breakthrought1d.org	Camp No Limits • Empowering resource for young people with limb loss & families • Annual Camps www.nolimitsfoundation.org	Helping Hands Foundation • Support & Resources for parents, children and sibilings with upper limb loss www.helpinghandsgroup.org
Limbs for Life • Health Insurance & Financial resources • Rehab & Activities information www.limbsforlife.com	Medical Center Orthotics & Prosthetics • Collection of resources & Organization for limb loss www.mcopro.com	St Lukes Amputee Support Group • Join fellow amputees for support, community resources and more. www.StLukesonline.org

For more information visit our website

www.kpoidaho.com

Books & Publications

Practical Guides & Support	Inspirational & Autobiographies	Support & Guidance

• Life After Limb Loss: A Guide for New Amputees and their Families
  ◦ By Julie Gross
• Amputee Q&A: Before, during and after amputaion
  ◦ By Kerri Trammel
• Alive & Whole Amputaion: Emotional Recovery
  ◦ By Dee Malchow
	• A Single Bound: Losing my leg, Finding myself, and training for life
	  ◦ By Sarah Reinertsen
	• One Man's Leg: A Memoir
	  ◦ By Paul Martin
	• You're Not Alone:With the Stories of 38 Remarkable Amputees
	• A Leg to Stand on: How to live without Excuses
	  ◦ By Jame R. Morey
	• Tough As They Come: One Soldiers Story
	  ◦ By SSG Travis Mills w/ Marcus Brotherton
		• AMpossible: Real- World solutions for Amputees to Accompish the Impossible
		  ◦ By Jeffery Allen Mangus
		• Living with Amplitude
		  ◦ Magazine
		• Still Standing: How to Overcome Amputaion, Get your life back, and become stronger than ever
		  ◦ By Tanner Boatwright

Many amputee support groups can also be found on Facebook & Instagram

KPO Instagram

KPO Facebook

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