

ABOVE THE KNEE & BELOW THE KNEE AMPUTATION

As the patient, you play a vital role in the decision-making process about your care. The purpose of this handbook is to provide you with the information you need to:

- Understand the reason(s) your doctor has recommended or done an amputation
- Prepare for surgery, both physically and psychologically (if you haven't had surgery yet).
- Learn to care for yourself after surgery.
- Have a successful rehabilitation.

At Limbionics, we recognize that no two persons- and no two disabilities- are the same. Our goal is to assist your medical, rehab and prosthetic needs. We also want to help achieve goals within your social, emotional and physical needs. Your care will be focused on maximizing your independence and quality of life.

We encourage you to ask questions with our practitioner(s). We are here to help you during your life changes.

ABOUT AMPUTATION

Amputation (the removal of the leg) is performed when:

- Only after all other attempts to save the leg have failed.
- When it is necessary in order to save the leg have failed.
- When it is necessary in order to save or improve a person's life.

When amputation is needed, the goal is to save as much of the leg as possible, making sure that all diseased tissue is removed. This is to promote good healing.

The most common types of amputations are:

- **Below the knee-** (BKA), where the leg is removed below the knee joint.
- **Above the knee-** (AKA), where the leg is removed below the hip.

WHY DO I NEED AN AMPUTATION?

Patients and family members need to know about their choices. You also need to have a realistic idea of what to expect after surgery. Then, you can make informed decisions about amputation. It is important that you and your family play an active role in making the decisions and setting the goals for your progress.

An amputation may be needed due to:

- **Injuries-** Injuries are the most common reason for amputations in people younger than age 50. An injury, like an electrical shock, frostbite, car accident or a severe burn, can destroy blood vessels and cause tissue death. Amputation is suggested only after all attempts made to save the leg fail or when it is necessary to save your life.
- **Diseases-** Complications from diseases such as diabetes and vascular disease can lead to infections of the blood and bone that cannot be reversed.
 - Diabetes is the leading cause of amputations in the United States. People with Diabetes often get infections or wounds that do not heal and result in an amputation.
 - Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD) are conditions in which blood vessels are unable to provide adequate blood supply and oxygen to your legs. These conditions also can lead to wounds that do not heal.
 - Amputation also may be recommended if you have cancer in your leg to prevent the spread of disease.

YOUR REHAB TEAM

Knowledge is Power! The more information you have about your surgery and recovery, the more control you have during the entire process. Remember, you and your family are the center of your team. Your input helps create the best plan of care for your following surgery.

Members that may be included in your Rehab team are:

- **Physiatrist:** A specially trained doctor called a physiatrist, is in charge of your rehab treatment and progress while you are a patient in the Rehab Hospital. A physiatrist has completed training in the board-certified specialty of physical

medicine and rehabilitation. The physiatrist works closely with your primary doctor and coordinates the overall team treatment program, while also consulting other specialists as needed.

- **Nurse (RN):** The nurse works closely with other members of the team to provide care and education. We encourage your family to also participate in this process.
- **Physical Therapist (PT):** The physical therapist works with you to improve your strength, endurance, balance, coordination and mobility. The PT helps you develop skills to move safely in a wheelchair or with other aides, like walkers, crutches, or canes. The PT will work closely with a prosthetist to determine the need for a shrinker and prosthesis. The PT will also provide you with education and training to use them.
- **Occupational Therapist (OT):** The occupational therapist will focus on increasing your independence. This includes tasks like dressing and bathing, transfers home management skills, strengthening, endurance, and splinting for positioning. The OT will also help you find adaptive equipment to maximize your independence.
- **Prosthetist:** A prosthetist is a person who measures, makes, fits and fixes a prosthesis (artificial leg) as prescribed by your physician. They work closely with your physical occupational therapists to ensure proper fit, and use of a prosthesis.

WHAT TO EXPECT AFTER SURGERY

Physical rehabilitation is the process of physically recovering from your amputation and adjusting to any physical changes you may experience. Your education and training will usually start the day after surgery. You will learn many important things about caring for yourself after surgery including:

- How to clean the healing wound and provide good skin care.
- How to look for signs of infection, including redness, swelling, increased soreness or drainage (fluid coming out) from the wound.
- How to wrap your leg or apply a shrinker (an elastic sock). These are important to help properly shape the residual limb.

- Ways to deal with phantom leg pain. This is the pain you feel in the leg that is no longer there.
- How to position your leg to avoid contractures or tightness of joints.
- Exercises that should be done to strengthen your legs after an amputation.
- How to move around after surgery.
- How to manage activities of daily living (like bathing, dressing toileting).
- Good eating habits that are important in helping the healing process.

CARING FOR YOURSELF AFTER SURGERY

Caring for your residual limb is important for your overall health and healing after surgery. Properly following the instructions provided by your rehab team can prevent infection and aid in the future use of a prosthesis.

Proper Skin Care

- Your nurse will teach you what kind of dressing to use on your incision and how often to change them
- Wet the dressing with saline solution before removing to prevent it from sticking to your skin.
- Do not attempt to remove scabs from your residual limb, it will fall off on its own time.
- Do not soak your residual limb in water (i.e. bathtub).
- Use mild soap and lukewarm water to clean the incision once it is fully healed and the staples/stiches have been removed.
- Use a soft towel to thoroughly pat your residual limb dry.
- Do not apply lotions to your residual limb until approved by your care team.
- Look at the skin on your residual limb regularly using a good light and a mirror to check all surfaces of the residual limb.

PLEASE NOTE: Call your doctor immediately if any of these things occur. These could be signs of infection or pressure sores, which need to be treated immediately:

- The incision line breaks open or begins to drain (leak fluid) after it has already closed.
- Cracks, sores. Blisters. Rashes. Swelling or increased redness on the residual limb.

REDUCING THE SWELLING & SHAPING YOUR RESIDUAL LIMB

One of the most important goals right after your surgery is to minimize and reduce swelling in your residual limb. While your residual limb begins to heal after surgery, there are a number of things you should do to prepare for the successful use of a prosthesis. Your residual limb needs to be properly shaped as soon as possible. Ways to reduce swelling include:

- Elevating your residual limb
- Ace wraps
- Shrinkers (elastic socks)
- Compression device

Your Rehab team will determine the best method for you.

Reducing Swelling

If you have had a lower leg amputation, the most commonly used devices to help reduce swelling are an elastic sock (shrinker) or compression wrap. Your doctor will determine which method you should use based on your particular case.

Compression Wraps

Your physical therapist will instruct you or a caregiver on how to properly use a compression wrap. This allows you to apply a graduated amount of pressure on the residual limb. We encourage you to practice this process repeatedly so that you are proficient at applying a consistent amount of pressure during the shrinking process.

Shrinkers

A prosthetist will measure and fit you for a shrinker sock. A shrinker sock should fit very snugly and smoothly, with no visible wrinkles. However, if you experience new or unusual pain or throbbing, remove the shrinker immediately. You should wear your shrinker at all times, even at night, unless otherwise instructed. Remove it two to three times a day to check your skin.

As your residual limb begins to shrink, the shrinker sock will become too large to wear and will begin to slide down. If this happens, ask your prosthetist to give you a smaller shrinker. A clean nylon sock and shrinker should be put on every morning after residual limb care. To clean socks and shrinkers, simply wash them in the sink with soap and cold water, and hang them up to air dry.

PHANTOM SENSATIONS

Many times people experience what is known as 'phantom sensation.' Or the feeling that the portion of your leg that was removed is still there. You may feel an itching or twitching, or the sensation that your leg is in a certain position when you are lying in bed. This type of phantom sensation is normal; and should decrease with time and with all desensitization techniques.

**Phantom pain is only felt by about 5% of all people who have amputations and can be mild to severe. It is often described as a sharp pain, a twisting or stabbing feeling in the area of the leg that has been amputated. There is not a clear cause of phantom pain. Fortunately, most individuals who experience phantom pain report that the pain lessens with time and becomes infrequent. If you experience phantom pain, it's important to let your health care provider know. Your team will work with you on ways to reduce these sensations.