



## Life as a New Amputee

In the beginning, amputation and the issues surrounding it, may feel overwhelming. If you are about to become an amputee, or have recently gone through an amputation, you are entering new territory and may (understandably) not know what to expect. At the outset it is normal and common to experience a variety of emotions which can include shock, anger, depression and sadness. It is important to remember that there is no right or wrong reaction to the news about your amputation. You may also go through varying stages of denial and acceptance. You will need time to adjust to the news that you are (or are about to become) an amputee and to understand that your own overall experience as an amputee is unique.

The cause of your amputation will influence how you feel: you may have lost your limb in an accident and the trauma of the accident is still with you; your amputation may be due to cancer and you will also be coping with related issues such as chemotherapy and/or radiation treatments; or your amputation may have been as a result of a circulatory illness or diabetes, which present issues you will still need to deal with on a daily basis. In this article we share some common issues for new amputees which may help guide you through your early months as an amputee.

### The Surgery

The orthopaedic surgeon performs the amputation surgery and any revision surgery that may be necessary later on. If the amputation is not an immediate emergency due to an accident, you will meet together beforehand to discuss the surgery and have any of your questions answered. After the surgery, the orthopaedic surgeon will make sure your residual limb (the part of your limb remaining after surgery) is healing well. He/she will discuss your rehabilitation plan with you, write the prescription for your prosthesis and may refer you to another professional, such as a physiatrist, who will oversee your care.

### The Clinic Team

There are several stages an amputee may go through during the first year following an amputation. Keep in mind that everyone goes through the stages of rehabilitation at his or her own pace and many factors like age, health and type of amputation come into play. Some stages will be shorter or longer than others, and certain stages may overlap. A team of professionals, the “clinic team,” will develop a rehabilitation plan to guide you along the way. The clinic team may include the orthopaedic surgeon, nurses, physiotherapists, occupational therapists, social workers and the prosthetist who will make your prosthesis. Sometimes, due to the level and cause of your amputation and/or other health factors, it may not be practical for you to be fitted with an artificial limb – your clinic team will be able to help you evaluate your individual situation. It is important to become an active participant throughout the whole process.

Understanding the roles of the different professionals involved in your care will help better prepare you for the rehabilitation process. With your active participation, the professionals you encounter will work with you before, during and after the amputation to help you on your road to recovery. It



is important that you develop a good relationship with your rehabilitation team, and that you ask questions whenever you are unsure of something. Remember as the amputee you are the team captain!

## Stage 1: Healing and Starting Physiotherapy

Following the amputation, there will be a healing phase, during which time the incision and surrounding tissue will recover. This timeframe can vary between a matter of weeks, a couple of months or even more, depending on the type of amputation, how much scar tissue may be involved and how the limb heals. In the hospital, the physiotherapist (PT) will teach you exercises to improve muscle function and will show you how to get around on crutches or a wheelchair (if it is required). The clinic team will recommend any rehabilitation therapy, physio- or occupational therapy and prostheses that may be needed.

In the early days following the amputation, healing of the incision and the residual limb is the main goal. The healing of the area surrounding the incision occurs within several weeks. If your amputation was due to cancer or a circulatory illness, the initial healing process may take longer. Part of the healing process involves promoting shrinkage of the residual limb. Swelling is always an issue after surgery and bandaging the residual limb helps with this. Your residual limb will continue to change shape and usually stabilizes over a period of about six months.

The nurse and physiotherapist are the professionals you will deal with most frequently at the beginning of your rehabilitation, and may coordinate your care. Be sure to tell the surgeon or nurse about any pressure points in the dressing, any pain you feel in your residual limb, or if you are experiencing phantom limb sensations (the conscious sensation or pain that the amputated limb is still there) or phantom limb pain.

Commonly, you may visit the physiotherapist around three to five times a week. You may also return to the hospital to have your bandage or cast changed/removed; alternatively, a local nurse or health care professional may be requested to handle this. After the sutures are removed, a compressive sock called a “shrinker sock” or a tensor bandage is used to continue to reduce swelling

(edema), and to help mold and shape the limb so a prosthesis will fit more comfortably.

## Stage 2: Regaining Mobility and Independence

While in the healing process you will want to become mobile and independent again as soon as possible. The clinic team will provide guidance as to the most suitable aids for you. There are many mobility aids to assist you if you are a leg amputee, for instance you may be able to use crutches or it may be preferable for you to use a wheelchair, or both. Numerous daily living aids are available to assist you if you are an arm amputee.

Sometimes, due to the level and cause of your amputation, if you have other health factors, or you have multiple amputations, it may not be practical to be fitted with an artificial limb(s).

Mobility and daily living aids will continue to assist you in being independent. If modifications are necessary to your house (for instance wheelchair ramps) check with community-based and federal or provincial agencies to see if funding is available to you.



## Stage 3: Visiting the Prosthetist

The prosthetist (often with the help of prosthetic technicians) is the professional who will fabricate your artificial limb (prosthesis). The clinic team, working with you, recommends the type of fitting appropriate for you and a prescription will be provided to the prosthetist. In many cases (especially in larger centres), the prosthetist attends a clinic right at the hospital at which the other rehabilitation professionals are present.

Sometimes you are referred to a prosthetic facility. It is important to remember that you have the choice of which prosthetic facility in your province you will attend. As the person who makes, adjusts and repairs your artificial limb, visits to the prosthetist will be part of your life from this point on. Having an open relationship with your prosthetist and feeling comfortable discussing your needs is critical.

Once the clinic team is satisfied that the residual limb has healed well enough, a prosthesis can be fitted. You may see the prosthetist two to three weeks following surgery or, if the healing process is taking longer, it may be four to six weeks or more. During a fitting, your prosthetist will examine your residual limb closely. It is a very personal experience and it can take some time to feel at ease with the process. When going for your first fitting, wearing a t-shirt will make fitting easier if you are an arm amputee. If you are a leg amputee, it is a good idea to wear or bring shorts as well as a comfortable shoe and bring its mate for the foot of your artificial limb. Do not forget to bring your prescription or any other relevant documents that you may have been given.

A “temporary” prosthesis (more common for leg amputees) provides early mobility while allowing the residual limb to continue to shrink and change shape (which is normal following any amputation). You may experience some pain early on as you learn to walk on your new prosthesis, this is quite normal. Describe any pain you may be experiencing to the prosthetist so that he/she can evaluate whether or not your fitting needs adjusting. Once the residual limb has settled into its final shape and the incision has healed, a “definitive” prosthesis (for permanent use) will be made. Arm amputees, unlike leg amputees who need a limb for mobility, are usually fitted later once their limb has finished shrinking and changing shape. Many amputees are fitted with a simple prosthesis at first (for example a passive arm that has no grip function), which allows them to get used to wearing a limb and to help early on with balance. Later on, the amputee and prosthetist often decide together on a more complex and functional limb.

The timeframe for the fitting process from beginning to end is variable depending on the type of prosthesis being fitted and how busy the prosthetic facility is at the time. The fitting process may take between four to eight weeks, and in some cases it could take longer.



*Photo: Eastern Prosthetic Clinic*

## Stage 4: Choosing an Artificial Limb(s)

There are many specific types of prostheses, including special limbs or devices for certain tasks and activities so it is very important to discuss your expectations and requirements with the prosthetist, who will help you to make the right choice.

New technology is making artificial limbs more cosmetically appealing and functional. Artificial legs are very useful for providing mobility and stability, and artificial arms can help with many daily household activities.

To make the best use of the time during your appointments with the prosthetist, it is a good idea to write down any questions you think of in advance. You do not want to forget anything. Taking notes during these meetings that you can refer back to later is also helpful. With so much information coming your way these notes can be reviewed when you have more time. There are many pros and cons for different types of artificial limbs and with your prosthetist you will

discuss which characteristics are the most important for you. Some of the considerations include: **activity level** – low-activity limbs are more simple in design and lightweight versus high-activity limbs which may contain more complex components and weigh more; **health concerns** – secondary health issues, such as circulatory issues or diabetes, may impact your lifestyle and thus the type of artificial limb you need; **level of amputation(s)** – if you have a higher level amputation your prosthesis will require more components; and the **cosmetic look versus functionality** – some limbs, for instance a hook, may not be as pleasing cosmetically but are very functional and, in discussions with your prosthetist, you will decide which is more important for you. Other considerations may include deciding whether you need additional **specialized limbs**. Many amputees have different artificial limbs for specific activities. A prosthetist can make a recreational arm or leg specially designed for sports, such as skiing or swimming. Specific devices, like a simple ring attached to the handlebars of a bicycle for upper-limb amputees, can also be made.



## Stage 5: Learning to Use Your Artificial Limb

Prosthetists or physiotherapists (PTs) teach leg amputees how to walk with their artificial limb (gait training). Arm amputees will be trained by an occupational therapist (OT) on how to use their prosthesis for daily activities; this may take longer and be more involved depending on the type of prosthesis being fitted. Occupational therapists also teach amputees adaptive skills, such as how to get dressed with one hand or with an artificial arm.

## Gait Training for Leg Amputees

Gait is the individualized manner in which each person walks, and gait training is the process of learning how to walk with your prosthesis. Developing a “good gait” is key to having a comfortable and efficient walking stride. It reduces the stress and wear and tear placed on your residual limb and the rest of your body. Gait also affects posture and energy expenditure. A physiotherapist (and often a prosthetist) will provide gait training to teach you proper techniques. Bad habits are hard to break later on, so it is in your best interest to learn the right way from the start. Later on, if you feel you are developing bad patterns, you can analyze your gait yourself in the mirror or visit your physiotherapist again for correction.

## Occupational Therapy for Arm Amputees

An occupational therapist teaches arm amputees how to operate their artificial arm(s) and terminal device(s) as well as adaptive skills. The lessons begin with general functions like learning how to move your arm and hand in a smooth manner. Training progresses to more complex task-oriented functions that require fine motor skills, like eating with a knife and fork. If your dominant



arm was amputated, the occupational therapist will help you learn how to write with your sound limb. Each type of artificial limb requires specific training to learn how to control the muscles for that particular artificial limb to function properly.

## Stage 6: Life as a New Amputee

Once an amputee's rehabilitation is coming to an end (which might include the fitting of an artificial limb) the individual may gradually return to their regular lifestyle and activities (if your doctor approves). Bigger stepping stones, which may take longer to achieve, can include driving a car (with modifications if needed) and returning to the workforce.

When it comes to rehabilitation, both in gait training for leg amputees and learning how to use your terminal device for arm amputees, the process may at times seem a little daunting or frustrating. Your rehabilitation team may suggest certain daily living aids and adaptations to the home or workplace to make life easier. Mobility aids can also help you stay active. Keeping a positive attitude is very important – the training you will undergo is an investment for a more independent and fulfilling future!

Other professionals (not previously mentioned) that you may be referred to or work with at different stages of the rehabilitation process include: an **oncologist** (specializing in the diagnosis, treatment and rehabilitation of individuals with cancer); an **orthotist** (builds devices to support or limit the movement of weakened joints or limbs); a **physician** (commonly referred to as a family doctor); a **psychologist or professional counsellor** (to provide coping skills, if necessary); and a **vocational rehabilitation counsellor** (evaluates your abilities and employment history).

## The Road to Recovery

Each professional plays an important role in your care, with the overall objective of meeting your rehabilitation needs. Support from family and friends can be invaluable during this time, and new amputees can also benefit from meeting other amputees who have gone through the rehabilitation process. Through peer support



groups or on a one-on-one basis, you can gain insight from other amputees since they have “been there.” Valuable information and encouragement is provided, helping you look towards the future. Ask your social worker what resources and services are available to you and how best to access them.

During the first year, you will acquire a great deal of knowledge about amputation and deal with many professionals involved in your care. There is a lot to handle, and you may at times feel overwhelmed but this should not take away from the sense of accomplishment in how far you have come on your journey. By the end of the first year, you will likely be wearing your artificial limb regularly (if an artificial limb was an option for you) and will have returned to your usual lifestyle.

While in the beginning it may seem as though your amputation defines who you are as a person, as time goes on, it will instead become just another aspect of who you are.