Upper Limb Rehabilitation & Therapy

Successful rehabilitation is shaped by several factors, such as the level of amputation, rate of healing, psychosocial considerations, level of acceptance, physical fitness, diet, social support, and personal motivation. Physical and occupational therapy help you recover and progress after amputation by working on muscle strength, coordination, independence in daily activities, and training you to use your prosthesis.

YOUR REHABILITATION TEAM

The key players on your rehab team are:



Occupational Therapist (OT)

Your OT is focused on helping you adjust to daily living activities after amputation. This can range from basic self-care to chores around the house and caring for others, work, hobbies and leisure activities, coordinating modifications to your home and vehicle, and training you how to use your prosthesis.

They can suggest strategies for modifications and adaptations to enable you to be more independent and return to what you want and need to do. Your OT can work on increasing your strength, range of motion, and coordination.



Physical Therapist (PT)

You may also work with a PT during your rehabilitation process. They can help you work on strengthening your core and the rest of your body, as well as assess your balance, and develop an exercise program to uniquely address conditioning and fitness.

THE REHABILITATION PROCESS

Rehabilitation has two phases. Preprosthetic training occurs before you receive your prosthesis, and prosthetic training occurs after you receive your prosthesis. These two phases may run simultaneously depending on your unique rehabilitation journey.

PRE-PROSTHETIC THERAPY

The pre-prosthetic phase typically begins in the hospital and then usually continues in an inpatient rehabilitation facility or your home. The primary focus during this recovery period is the healing of the surgical incision and preventing complications like joint stiffness and infections. During this time, your therapist will work with you on:

Activities of Daily Living (ADL) Regaining independence during self care tasks will be the initial focus in therapy. This includes taking care of your residual limb as it heals, as well as taking care of your needs on a daily basis such as eating, dressing, bathing, and toileting.

Limb Care. You will learn to care for, massage, and condition your limb. This will help reduce tenderness, desensitize the limb, strengthen muscles, support tissues,



and increase healthy blood flow to reduce swelling and speed healing. You may also begin to address different types of pain during this phase of rehabilitation.

As you heal, your residual limb will change shape and size. You will begin a therapist guided program for reducing swelling and shaping your limb. This will improve pain and sensitivity as well as ensure your prosthesis fits and operates well.

• Stretching & flexibility. Stretching will help maintain muscle length and prevent stiffness, as well as increase your flexibility and range of motion. Both are important in overall well-being, movement, and returning to activities, as well as preventing overuse injuries in the future.

 Strength & cardiovascular conditioning. You will begin to rebuild any strength that was lost during your recovery time, as well as begin the process of gaining the strength you need to perform daily activities with new body mechanics. You may even begin the process of establishing motor control and strength necessary for using a prosthesis in the future. As your strength and skill improve, the rehabilitation program will advance. This often includes maintaining the health of your remaining joints and non-amputated side by developing awareness of body symmetry and focusing on upper limb and trunk posture during daily activities. This will help prevent overuse injuries.

PROSTHETIC THERAPY

Once you receive your prosthesis, you will start using it during occupational and physical therapy, as well as gradually increasing the time wearing it according to your prosthetist's



schedule for your care. Therapy at this stage may be one-on-one with your therapist(s), in a group setting, or both depending on your plan of care. You will also learn some exercises to do on your own. It is important to be consistent with your home program.

You will start by learning the basics of your prosthesis — putting it on and taking it off, managing the fit, and keeping it clean. Next, you will work on basic control of the device including coordination, strength, and endurance so that you feel more comfortable in how to operate the components. As you progress, your OT will guide you through more challenging tasks, as well as strategies for how to incorporate the device into your daily activities. More advanced exercises will be added to help you to return to the highest functional level that your injury will allow.

THE IMPORTANCE OF ATTITUDE

Patience, persistence, and positivity are essential to successful rehabilitation. Make goals that are meaningful to you. You can trust your therapy team to make sure your goals are appropriate as well as inspiring, and help you work towards them in a reasonable time frame. As you find success along the way, you will feel empowered to continue to the next step of your journey.

