

## Physical Therapy

### *After your heart transplant*

*You can get back to most activities when you feel ready. Use common sense as you progress. If something hurts, if you are tired, or if you feel an activity is just too much for you, stop or slow down for a while and try again later.*

*It may take some time before you have a lot of energy. It is important to give yourself enough time to recover.*

### After Surgery

Your physical therapy will start soon after your operation. We will gently move your arms and legs while you are in bed the first few days after your transplant. These exercises will help keep your joints and muscles from getting stiff.

When the doctors say you are ready, you will start doing exercises where you make the movements yourself. At first, these will be exercises where you move your arms and legs. You will slowly increase the number of times you do each exercise. We will show you how to get in and out of your bed or a chair in a way that will not harm your incision. We will also teach you relaxation exercises.

The exercises we show you to do while you are in the hospital will be the warm-up part of your exercise routine when you go home. At first you will do them lying down, but as you get stronger you can do them while sitting, then while standing.

Walking is one of the main types of exercise you can do in the hospital. It is also a good exercise to continue once you return home. You will start by taking short walks around your room.

Good posture is very important, so you will learn exercises to help make your back muscles stronger.

We will teach you how to check your blood pressure and your pulse. You will be able to practice this while you are still in the hospital. It is very important to keep checking these vital signs even after you go home (see Chapter 5, “General Health Guidelines”).



*While you are in the hospital, we will teach you how to check your blood pressure and your pulse. You will need to keep checking these vital signs after you go home.*

*When you leave the hospital, you will need to keep up with your exercise program. We will ask you to select either walking or biking as your main aerobic activity.*

*Pay attention to your vital signs as you exercise. Take your heart rate before, during, and after your exercise, and take note of your blood pressure and breathing as well.*

By the time you leave the hospital, you will be doing stretches, walking, and light *calisthenics* (exercises to build strength). We will keep track of your exercises while you are in the hospital. You should continue to keep an exercise log after you go home. It is very important to continue your exercise program after you leave the hospital.

## **Your Exercise Program at Home**

By the time you leave the hospital, you should also be doing warm-up exercises, stretching, and 15 to 20 minutes on a stationary bike without resistance. Your home exercise program will use the same exercises you were doing in the hospital. You will also need to choose either walking or bicycling as your main aerobic exercise.

You may feel some discomfort when you begin a new activity or increase the intensity of an old one. But, your exercises should not cause pain. If they do, stop the activity and call the transplant office.

How you feel can help you decide how much activity to do. Take note of how you are feeling before, during, and after exercise.

## **Watch Your Breathing**

Your breathing will tell you how hard to exercise:

- You should not be so out of breath that you cannot talk easily.
- Do not work so hard that you have to take more than 1 or 2 breaths to count out loud to 15.

If you cannot do these things, lower the intensity of your exercise.

## **Check Your Pulse**

Your heart rate can also help you know if you are exercising too hard. Keep in mind that your heart rate will not speed up when you exercise the same way as someone who still has their original heart. It can take about 5 minutes for your heart to react to sudden exercise. This is one reason it is important to do your warm-up routine.

Check your pulse before you start exercising. **Do not start exercising if your resting heart rate is above 120 beats per minute.**

While you are exercising, check your pulse again:

- 6 minutes after you start walking or riding the stationary bike
- From time to time during the rest of your exercise period
- After you stop, to compare it to your resting heart rate

*Remember to warm up before and cool down after your main exercise routine. It is not good for your heart to start or stop exercising too quickly.*

During your exercise, your heart rate should:

- Not go more than 20 to 30 beats per minute above your resting heart rate. If it goes faster, slow down.
- Never be more than 130 beats per minute, unless your doctor says it is OK to go higher.

### **Warm-Ups**

By the time you go home, your warm-ups will include standing exercises. If you wish, you may start to add weights at your wrists for the arm exercises.

- Start with 1-pound weights and do each arm exercise 10 times.
- You can increase the weight 1 pound at a time, up to 5 pounds total.
- Do not use more than 5 pounds for the first 6 months after your transplant. More weight could harm your incision.
- After your incision has healed and your doctor says it is OK, you may use more than 5 pounds of weight if you wish.

Tell your transplant team if, while you exercise:

- Your **systolic blood pressure** (the top number):
  - Is over 190 mmHg
  - Increases more than 40 mmHg over your normal reading
  - Decreases more than 20 mmHg from your normal reading
- Your **diastolic blood pressure** (the bottom number):
  - Is over 110 mmHg
  - Increases more than 15 mmHg over your normal reading

### **Aerobic Activity**

We encourage you to choose either biking or walking as your aerobic activity. If you choose biking, talk with the physical therapist about the best program to follow. You will build up to more time on your bicycle based on your progress.

If you pick walking as your aerobic activity, start with  $\frac{1}{4}$  of a mile. When you can walk this far in 5 to 6 minutes, 3 times in a row, you will be ready to increase your distance. Add  $\frac{1}{4}$  of a mile at a time until you build up to walking 1 full mile in 20 to 24 minutes.

### **Cool Down**

It is important to cool down after exercising. It lessens the amount of stress on your body.

*We encourage you to participate in a cardiac rehabilitation program after your transplant.*

To cool down:

- Slow your biking or walking pace for the last 5 minutes of your exercise period.
- Then do each of your stretches for 1 minute each.

### **Your Exercise Routine**

Try to get regular exercise about 4 to 5 times per week. Each session should include:

- Warm-ups
- Aerobic activity
- Cool down with stretches

If you wish to swim or do another type of exercise, follow the same guidelines about your vital signs, warm-ups, and cooling down.

Please call the Physical Therapy office at 206-598-4828 and ask to speak with your therapist if you have questions.

### **Sternotomy Precautions**

After your transplant, do not put more than 10 pounds of pressure on either of your arms for 3 months. This includes not leaning on your arms when you stand up or sit down. It also means putting less pressure on your arms when you get out of bed. Your physical therapist will show you how to do this safely.

Your transplant team will let you know when your incision has healed and when you can put more than 10 pounds of total pressure on your arms again. Read Chapter 5, “General Health Guidelines,” to learn more about returning to specific activities and hobbies.

### **Questions?**

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

Cardiology Clinic:  
Weekdays 8 a.m. to 5 p.m.,  
call 206-598-4300.

After hours and on weekends and holidays, call 206-744-2500. Say you are a heart transplant patient. A nurse will assess your problem and help you.