UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

Phase I Cardiac Rehab: Transfemoral Approach

Activity precautions and exercise program

This handout explains the activity precautions and exercise program you need to follow as you recover from your transcatheter heart procedure using a transfemoral approach.

Activity Precautions

Your procedure was on:

Follow precautions until after:

Phase II Cardiac Rehab Referral

You have been referred for phase II cardiac rehab at:

Precautions to Follow

Your procedure was done through a small incision in your groin, on one or both sides of your body. Your surgeon accessed a blood vessel in your leg and inserted a catheter to repair or replace your heart valve.



When you leave the hospital, keep doing the exercise and walking program that your therapists taught you.

Follow these precautions to help your incision heal:

For 2 Weeks After Your Procedure

- Do **not** lift anything that weighs more than **10 pounds**. This includes groceries, laundry, children, pets, or other items. (A gallon of milk weighs about 8½ pounds.)
- Do **not** hold your breath or bear down with any activity. For example, do not strain with exercise or while using the toilet.
- Do **not** open tight jar lids, stuck windows, or heavy doors. Ask someone for help.

- **Have someone else do chores** such as vacuuming, mopping, digging, mowing the lawn, or other "heavy" housework.
- ☐ If this box is checked, your surgeon also accessed a blood vessel in your wrist. Please follow these precautions:
 - **For 48 hours**: Do not lift, push, or pull anything that weighs more than **1 pound** with that arm. (A can of beans weighs 1 pound.)
 - For 1 week: Do not lift, push, or pull anything that weighs more than 5 pounds with that arm. (A half gallon of milk weighs almost 5 pounds.)

Your Exercise Program

While You Are in the Hospital

Your therapist will prescribe an exercise and walking program for you to start while you are in the hospital. It is important that you walk with staff 3 to 4 times every day. Activity will help:

- Your digestive, *respiratory* (breathing), and *circulatory* (blood vessel) systems recover from your procedure. This will help you:
 - Stabilize your blood pressure and reduce dizziness
 - Stop using extra oxygen
 - Improve your strength, balance, and energy
 - Improve your mood and help you sleep better at night
 - Ease constipation and nausea

When You Go Home

When you leave the hospital:

- Keep doing the exercise and walking program that your therapists taught you.
- Your goal is to **be walking at least 30 to 40 minutes every day** by 6 weeks after your procedure.

To get the best results from your walking program:

- Warm up before you walk and cool down afterward. Stretch or do gentle exercises for at least 5 minutes before and after you walk. This will allow your heart and breathing rates to increase slowly before you walk and decrease slowly afterward. This helps your heart and muscles get the right amount of oxygen.
- Take many short walks every day, throughout the day. Slowly increase the amount of time you spend walking each day. To do this:

- When you first get home after your procedure, walk at least 3 times a day for 5 minutes each time. This is about the same amount of time that you walked while you were in the hospital.
- Each week, increase the total time you exercise by about 3 minutes. Do this by adding 1 minute to each of your 3 daily walks until you are walking for a total of 30 to 40 minutes every day. Here is a sample walking program:

Sample Walking Program

Week #	Warm-up Exercises	Walk	Cool-down Exercises	Total Exercise Time	Goal Met?
1	5 min.	3 x 5 min.	5 min.	25 min.	
2	5 min.	3 x 6 min.	5 min.	28 min.	
3	5 min.	3 x 7 min.	5 min.	31 min.	
4	5 min.	3 x 8 min.	5 min.	34 min.	
5	5 min.	3 x 9 min.	5 min.	37 min.	
6	5 min.	3 x 10 min.	5 min.	40 min.	

Monitor Your Body

For 6 weeks after your procedure, be active at a low to moderate level. Pace yourself. Slow down or rest if you are breathless, dizzy, cannot talk, or are perspiring.

Your physical therapist will teach you different ways to monitor how hard your body is working. These include:

• **Taking your pulse.** Your pulse will tell you how hard your heart is working. For the first 2 weeks after your procedure, make sure your pulse does not increase more than **20 to 30 beats per minute** above your resting heart rate.

Check your pulse at rest before you start, during, and after exercise:

- Use your index and middle fingers (not your thumb) to find your pulse on the inner part of your wrist, just above your thumb. If you cannot find your wrist pulse, gently find the pulse on one side of your neck. Do not press hard. Pressing too hard could reduce blood flow to your head and make you feel dizzy or faint.
- Count the beats for 1 minute.
- Subtract your normal resting heart rate from your pulse taken during and after exercise to see how much your heart rate has increased.

- Monitor your rate of perceived exertion (RPE) on a scale of o to 10. When you are active, think about how hard you are working, or how much effort it takes for you to keep doing the activity you are doing. Rate your effort on a scale of o to 10, with o being lowest exertion and 10 being highest exertion. If you are working between levels 2 and 4 on a scale of o to 10, you are exercising at a low to moderate level. This is between 11 and 13 on the Borg RPE scale of 6 to 20 (see table on page 6, "Borg Rating of Perceived Exertion").
- Talk to someone while you exercise. Use your rate of breathing to guide how hard you are exercising. When exercising or walking, you should not be so out of breath that you cannot talk with someone.
- Pay attention to your body. Reduce your activity during exercises and daily tasks (such as dressing, bathing, grooming, and household chores) if you:
 - Have an increase in heart rate (pulse) of more than 20 to 30 beats above your resting heart rate, or if your RPE is greater than 4 during the activity
 - Keep having a high heart rate for 10 minutes after you stop exercising
 - Are breathless for longer than 10 minutes after you stop exercising
 - Have fatigue (extreme tiredness) or notice increased swelling in your legs or feet up to 24 hours after you exercise
 - Have pain or cramping in your leg muscles
 - Have pain in your joints, heels, or shins

Tip: To help save your energy, sit to take a shower and do other activities that you usually stand to do.

- **Stop exercising** and talk with your doctor before starting again if you:
 - Have an abnormal heart rhythm an irregular pulse, *palpitations* (a rapid, fluttering, or pounding heart), sudden very slow pulse, or a sudden burst of rapid heartbeats
 - Have new or ongoing pain or pressure in your chest, back, arms, or throat
 - Feel dizzy, lightheaded, or faint
 - Lose coordination, have changes in your vision, or become confused
 - Have cold sweats or become pale
 - Have nausea or vomiting

When at home, if you need medical care right away, call 911.

Phase II Cardiac Rehab

Use these same guidelines for your exercise program when you leave the hospital. Most people who have heart procedures start phase II cardiac rehab 2 to 6 weeks after discharge. **Remember**, you cannot drive for 2 weeks after your procedure.

The staff at the cardiac rehab facility you have chosen will help you safely increase the intensity and duration of your exercises. Your goal is to be able to do your exercise program on your own. Keep doing your walking program on the days you do not go to cardiac rehab.

American Heart Association Resources

Visit the American Heart Association website at *www.heart.org* for ideas and inspiration to help you stay active and healthy after your procedure. From the menu bar, click on "Healthy Living" and then "Physical Activity."

Your Questions Are Important

While you are in the hospital, your physical therapist will answer your questions about exercise. If you have questions or concerns about exercise after you leave the hospital, talk with your outpatient cardiac rehab provider, outpatient physical therapist, or main care team.

Questions and Notes

se this space to write down questions you want to remember to ask you are providers, and for notes you take during your visit.						
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Exercise Intensity Guidelines

For 6 weeks after your procedure, **you must exercise at a low to moderate level** to help your heart recover. To judge the correct level of *exertion* (effort), rate your effort on a scale of 0 to 10, with 0 being least effort and 10 being highest effort.

You are exercising at a low to moderate level if you are working **between levels 2 and 4 on a scale of 0 to 10** (between levels 11 and 13 on the Borg RPE scale of 6 to 20).

The table below shows the Borg RPE scale and how it relates to your level of effort. The green area with the bold line around it is your goal Training Zone.

Borg Rating of Perceived Exertion (RPE)

	rg CR10 (Category atio) Scale: 1 to 10	Zone	Bor	Borg RPE Scale: 6 to 20	
О	Nothing at All		6	No Effort at All	
	Very, Very Easy	Warm-up	7	Extremely Light	
		and Cool-	8		
1	Very Easy	down Zone	9	Very Light	
			10		
2	Easy	Training	11	Light	
3	Moderate	Zone (This zone is	12		
4	Somewhat Hard	your goal.)	13	Somewhat Hard	
			14		
5	Hard	Strenuous	15	Hard	
6		Exercise	16		
7	Very Hard	Zone (This zone is	17	Very Hard	
8		too hard –	18		
9		slow down!)	19	Extremely Hard	
10	Greatest Effort		20	Greatest Effort	

Questions?

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

Adapted from ACSM's Guidelines for Exercise Testing and Prescription Seventh Edition (2006) and from Shinichiro et al. Rating of Perceived Exertion for Quantification of the Intensity of Resistance Exercise. Int J Phys Med Rehabil 2014.