

Living with an Aortic Aneurysm or Dissection

Activity recommendations

This handout explains how to safely continue activities of daily living and exercise for patients with aortic aneurysm or dissection. These guidelines are provided by the UW Multidisciplinary Thoracic Aortic Program (UWMTAP).



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Getting daily exercise and staying active in your daily life has many health benefits. Exercise helps to raise your heart rate and breathing rate, which is an important part of keeping your *cardiovascular system* (heart and blood vessels) healthy.

In the past, doctors worried that for patients with heart conditions, any level of exercise could be dangerous. We now know that exercise can be beneficial for patients with *aortic* (heart) conditions, such as aneurysm or dissection.

Regular exercise can help lower blood pressure and keep your cardiovascular system healthy and strong. Regular exercise also can help prevent weight gain, reduce stress, and improve mental health.

How much should I exercise?

For all patients with an aortic dissection or aneurysm, it is best to build up fitness slowly over time. Doing too much, too fast can cause injuries that stop you from doing any exercise.

We encourage patients to exercise regularly.

- We suggest this starting exercise goal:
 - 150 minutes each week of a moderate-intensity aerobic activity (i.e., fast walking or light bicycling) **or**
 - 75 minutes each week of a vigorous aerobic activity (i.e., jogging, hiking, fast bicycling)
 - Try to spread this exercise throughout the week.
- Adding 2 days of strength training each week can provide extra benefits. Weightlifting and resistance training should be light enough that you can breathe easily. You should not have to hold your breath or strain.
- Talk to your doctor before trying more difficult exercise or sports.

If You Are New to Exercising

- Start by going for a 10-15 minute walk at a regular walking pace. Keep your heart rate steadily elevated and try not to stop or take breaks. If that feels too easy, add 5 minutes each day.
- You should be able to talk while walking. If you are short of breath, this is too fast.
- The goal is not to be exhausted. Slowly push your body to get stronger and do more exercise.

Cardiovascular exercise

- Avoid high-intensity interval training (HIIT).
 - If you are working so hard that you cannot talk, this is too intense.
 - If you can do the exercise and still talk easily, this is a good intensity level.
- The way your heart rate changes during exercise varies depending on your age and fitness level.
- In general, we suggest you keep your heart rate below 120 *BPM* (beats per minute). This may be adjusted based on your fitness level. If you feel this level is too low, then please discuss your goals with your doctor.

- Patients who are new to exercise should start off slowly and build up over time.

Weight training

Light weight training is good for building muscle mass and improving overall fitness. It is best if you can do weight training at least 2 times each week.

- For patients with aortic dissection or aneurysm, it is best to focus on higher repetitions of lighter weights. Avoid heavy lifting.
- There is not a specific weight limit, as this will vary from one person to another and the specific exercise.
 - For most patients, 30-40 pounds is the maximum safe limit.
 - If you can do an exercise with more than 10-15 repetitions without too much effort, this is okay.
 - If you must hold your breath and strain, then this is too much weight.

If You Exercised Regularly Before your Dissection or Aneurysm

- We recommend slowly restarting your previous exercise program, and following the guidelines in this section.
- We recommend that you avoid competitive sports. These might make you push yourself too hard. If you want to do more difficult or competitive activities, please discuss your goals with your doctor.

Cardiovascular exercise

- Even if you are used to doing high intensity interval training (HIIT), we recommend that you now avoid this type of exercise. If you want to try this type of training again, please meet with your doctor to discuss a safe and careful plan.
 - If your doctor approves of more intense exercise, we recommend working up to it slowly. Start with a lower frequency and intensity than before your dissection or aneurysm.
- We recommend you consider changing to a more steady and continuous aerobic exercise, instead of exercise that involves sudden “bursts” in activity.

- We do not know what heart rate is safe for athletic people who have aortic dissection or aneurysm. During exercise it is best to start with your heart rate level at least 20-30 BPM below where it was before your aneurysm or dissection. Start with easier intervals and if that feels good, you can slowly build back up to more intense training. We recommend that you avoid working out at maximum intensity.

Weight training

Light weight training is good for building muscle mass and improving your overall fitness.

- After your dissection or aneurysm, it is best to try higher repetitions of light weights and avoid heavy lifting.
- There is not a specific weight limit, as this will vary significantly from one person to another.
 - If you can do an exercise with more than 10-15 repetitions, this is probably a good amount of weight.
 - If you must hold your breath or strain, then this is too much weight.

Other Considerations

Orthopedic limitations

Many patients have orthopedic issues that limit their ability to exercise. This could include back issues, or hip or knee arthritis. If you have one of these conditions, it is important to find an exercise that you can do without making that problem worse.

- **Water exercise:** water aerobics and slow swimming are excellent ways to exercise without much impact on your back or joints. The YMCA and other community pools often offer water exercise programs.
- **Low-impact alternatives:** stationary bicycle and elliptical machines are good for low-impact exercise. A recumbent bicycle can help if you have lower back issues. If you have access to a gym, it is best to try out different exercise machines with the help of the gym staff to see what feels best.

General Activities to Avoid

- There are not many activities that you need to limit. However, there are some high-impact, high-intensity activities you should avoid.
 - Avoid rollercoasters, skydiving and/or any other activities that involve sudden stops, or rough, jerking movements.
 - We do not have enough evidence to say that you must never do these activities again. However, it is best to avoid them as they may suddenly increase the pressure in your aorta.
- We also recommend you avoid heavy lifting at home, such as moving heavy boxes or furniture. If you must hold your breath and strain, this lift is too heavy.

Signs and Symptoms to Watch Out For

- If you experience pain in your chest, back, flank/side or abdomen, **STOP** exercising immediately and rest.
- If the pain continues, seek medical attention.
- Avoid any exercise that causes this type of pain.

How can I learn more?

To learn more about UWMTAP (UW Multi-disciplinary Thoracic Aortic Program), or if you have any additional questions, please visit our website: sites.uw.edu/uwmtap

Questions?

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

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