

Treadmills, Bicycles and PAH: Questions about Exercise

We will discuss a variety of issues regarding exercise and PAH. These will include the types of exercise tests used to assess a patient's status and response to treatment, and recommendations about safe, manageable exercise programs to maintain optimal health in patients with PAH. We will set aside ample time to take questions from the audience about their exercise habits and goals.

1. 6 minute walk test for diagnosis and for following response to treatment

One of the most common tests performed on patients with PH is the 6 minute walk test (6MWT). The patient is asked to walk as far as they can in 6 minutes; they are not encouraged during the test and are allowed to rest during the 6 minutes, though the clock keeps ticking. The distance they achieve is recorded, as is, frequently, a score of how short of breath they feel and their high and low oxygen level. This test gives information as to how a patient is likely to do when first diagnosed, and again in response to therapy. Most PH patients on therapy will have this test repeated one to four times yearly. The PH care provider will use the result, along with other information, to decide on changes in therapy. The test is also frequently used to judge the effectiveness of new therapies being studied in clinical trials.

Some patients with PH may undergo a more intensive exercise test, either on a treadmill or on a stationary bicycle. Often this type of test will measure how much oxygen the body takes up and uses with exercise, and the exercise will gradually increase in intensity until the patient is too tired to continue. While this type of test may be too strenuous for some patients, those with less severe PH may undergo the test safely.

2. Which types of exercises should be done by PH patients and which ones should be avoided; how to be safe with exercise.

The most important rule is to always check with your PH care provider before engaging in any exercise. Generally, patients with PH are encouraged to exercise regularly and safely. Low intensity exercises, such as walking, bicycling, swimming and using aerobic gym equipment are felt to be safe and beneficial. Any weight lifting should emphasize low weight and frequent repetition; heavier weights should be avoided. Also to be avoided are sudden bursts of activity and high intensity aerobic activities such as running. If any shortness of breath, chest pain or lightheadedness occurs, the exercise should be stopped and the patient should report the symptoms to the care provider.

3. Pulmonary rehabilitation

A recent study found that patients with PH who participated in a supervised exercise program had marked improvements in their 6MWT distances and overall well being. This study used a fairly intensive exercise program. It is not yet known whether less intensive programs, such as those typically used in standard pulmonary rehabilitation programs, would yield similar benefit.