Several survivors of polio make inquiries about the heart stress test using a treadmill. They are frightened of the thought of it. Most polio survivors, even if they could use a treadmill long enough to get their heart rate up, will not be able to walk well or at all when they finish the test because they have stressed their polio-damaged motor neurons perhaps more than their heart. Several of our members are now confined to a motorized chair and cannot stand or walk. There is a nuclear stress test that I have asked Dr. Vijaya N. Koka of Cardiology Associates of Ocala (Ocala, Florida) to explain to you in the following article.

Nuclear Stress Test

Stress tests are done to evaluate if there is a compromise in the circulation to the heart. A stress test is of two general types: 1) A regular treadmill stress test, and 2) a nuclear stress test.

A regular stress test is not suitable for everyone. It is good when the baseline EKG is normal and the person is able to walk satisfactorily on a treadmill. It costs less but it is less reliable than a nuclear stress test.

A nuclear stress test involves using very low doses of radioactive tracers. Radioactive tracers are given both at rest and when a person is under stress. The stress can be induced by exercising on a treadmill or by using chemicals. The chemicals used usually are Adenosine and Dobutamine. Adenosine is not suitable for patients with conditions such as asthma. The radioactive tracers are given to the patient when he/she is under stress and the images obtained are compared with the images obtained at rest. The nuclear stress test gives a fairly good idea about the degree of perfusion to the heart and also the motion of the heart. It provides a fairly good idea (not 100%) of the need for further cardiac testing such as catheterization.

A stress test is usually indicated when there is a moderate probability that a person may have heart disease. It is usually done for patients with chest pain and shortness of breath.

It is important to watch one's waistline, to eat a healthy diet (low-saturated fat, low-carbohydrate, high-fiber, high-protein), to exercise daily to the best of one's ability and to refrain from smoking.

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