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## Introduction

Physicians can use the colorized blood flow display on the monitor to help him or her find any problems. Some heart problems, like those that affect the coronary arteries, which carry blood to your muscles, only happen when you exercise. A stress sonogram may be recommended by your doctor to look for problems with arterial blood vessels. A sonogram, on the other hand, is unable to reveal any blockages in the heart's arteries. In the diagnosis, treatment, and follow-up of patients with any known or suspected heart disease, diagnostic technique has become routine. In the medical field, it is one of the most widely used diagnostic imaging modalities. It will provide a wealth of useful information, including a measurement of the internal chamber size, the gut's dimensions and shape, pumping capacity, the location and extent

A sonogram is a non-invasive procedure that looks at the heart's structure and operation. A microphone or other electrical device emits sound waves at a frequency that cannot be detected during the procedure. The sound waves travel through the skin and various body

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tissues to the center tissues, where they bounce or "echo" off of the center structures, once the electrical device is placed on the chest at prescribed angles. A laptop receives these sound waves and generates moving images of the valves and center walls. Echocardiograms are used by doctors to help them diagnose problems with the heart, such as broken internal organ tissue, chamber enlargement, stiffening of the center muscle, blood clots in the heart, fluid around the heart, and heart valves that are broken or not working properly. A sonogram is a test that uses ultrasound to determine how well your valves and muscles are working. Your doctor will be able to get a good look at your heart's size and shape thanks to the moving footage created by the 1000 waves. You might hear them refer to it as "echo" briefly. For a variety of internal organ pathology, the internal organ diagnostic technique is becoming an essential diagnostic tool. Utilizing mandatory data can help both non-internal organ specialists and internal organ specialists understand diagnostic technique images and reports, thereby enhancing patient care. Utilizing harmless sound waves known as ultrasound, a sonogram quickly and efficiently collects important information about your heart. When they have questions about your heart's dimensions, shape, and performance, our doctors frequently use a sonogram or echo. By examining the structure of the center and close blood vessels, the flow of blood through them, and the center's pumping chambers, a sonogram will make it easier to diagnose and monitor heart conditions. a procedure that looks inside the chest's tissues and organs with high-energy sound waves (ultrasound). An image of the center's dimensions, shape, and position on a video display (an echocardiogram) is created by sound wave echoes. The motion of the heart while it is beating may be depicted in the photographs, as well as the internal components of the heart, such as the valves. Abnormal heart valves and heart rhythms, heart murmurs, and heart failure-related injury to the center muscle can all be helped by diagnostic technique. Infections on or around the heart valves, blood clots or tumors in the center, and fluid buildup in the sac surrounding the heart will also be checked [6,7].

A sonogram is an ultrasound that takes pictures of the heart's structure and functioning with a small electrical device. In an electrocardiogram (ECG), electrodes are positioned on the chest to monitor the electrical activity of the heart, such as its rate and rhythm. Typically, stress tests are used in conjunction with echocardiograms to assess heart function. An echo examination is performed at rest and then repeatedly while exercising (usually on a treadmill) to look for changes in the center muscle's function after exertion. A sign of artery disease is difficulty moving muscles while exercising. A sonogram is a test that uses ultrasonic sound waves to take pictures of the center. Sound waves are used in a Christian Johann Doppler examination to observe the speed and direction of blood flow. A pediatric specialist can get useful information about the anatomy and performance of the heart by combining these tests. The most common test used to diagnose or rule out heart disease in children and to monitor children who have already been diagnosed with a heart condition is the diagnostic technique. Children of all ages and sizes, fetuses, and newborns are the subjects of this examination. One of the most essential organs in the body is the heart. To ensure that there are no lasting effects on your health, problems with your heart should be diagnosed and treated as soon as possible. A sonogram is one of the most common diagnostic tests used to check the center. It provides images of the center using high-frequency sound waves, similar to an ultrasound. The sonogram, in contrast to other diagnostic procedures, is painless and does not