

Open and Upright MRI Scanners

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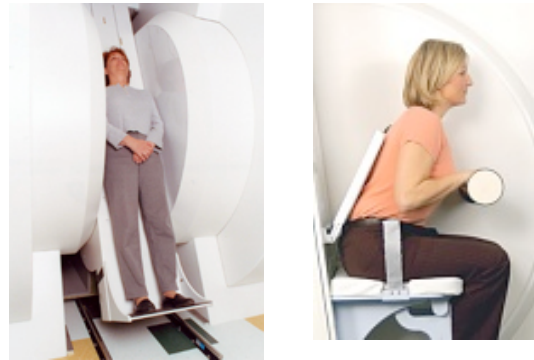
MRI scanning is a technique that has been used since the 1980s as a noninvasive test that enables physicians visualize internal structures of the body in addition to diagnosing and treating medical conditions. The imaging uses a powerful magnetic field, radio frequency pulses and a computer to produce detailed pictures of organs, soft tissues, bone and other internal body structures. MRIs provide a better contrast between soft internal tissues than other forms of scanning, such as CAT scan and x-rays.

There are three types of “lay down” MRI machines. The first, a traditional Closed MRI, uses high field magnetic strength to produce high quality images. Ninety percent of all MRI machines are closed. Open Air MRIs, the second type, use low field magnetic strength and produces lower quality images; however, these machines have open sides and ends which benefits patients with anxiety. The third and most advanced type, of MRI machines is the Open MRI. Open MRIs use a magnet that is much stronger than most other open-air-type MRIs. This produces images with greater detail and leads to more accurate diagnoses.

Open MRIs are beneficial to all patients including claustrophobics, heavier athletes, children and those who are handicapped. Additionally, these MRIs feature technology that can diagnose spinal problems, brain diseases, strokes and multiple sclerosis in addition to producing images of internal organs without the traditional dye injections.



Another type of MRI is the stand up machine. Stand up MRIs enable all parts of the body, particularly the spine and joints, to be imaged in the weight bearing state. This is significant to the future of scanning because certain cardiovascular and neurological disorders only exhibit their symptoms when the patient is upright.



Similarly to stand up MRIs, upright MRIs scan patients in the positions where they experience the discomfort. These machines enable an individual to be scanned while bending, sitting, stretching, leaning and lying down. The images taken while there is a normal body pressure on the spine and other joints allow a physician to diagnose a patient more accurately.

With new MRI machines, the diagnosis and treatment of problems and disorders can occur more rapidly than in the past. Hopefully, with these advances, patients won't have to undergo multiple tests for a physician to have a clear picture of what is occurring.

Sources:

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