

In an age when we as individuals take our health seriously and make an effort to be proactive about our own physical and mental well-being, it is only natural that we want answers with respect to how medical technology & advances can impact us.

In recent months there has been significant attention provided to Whole Body Scans using Ultrasound, Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) as a preventative cancer screening tool. All of these modalities have issues as a screening tool and it is critically important to understand their limitations.

The use of imaging to screen for potentially life threatening disease is neither novel nor new. In recent years CT, due to its quick acquisition time, was utilized as a tool for whole body preventative screening. However, CT is no longer thought of as a general screening tool for two reasons. The first is that CT requires ionizing radiation which is a risk factor for cancer. In particular, if the examination needs to be periodically repeated then this should be considered an unacceptable cost to an asymptomatic patient. Additionally, CT performed without an intravenous iodine containing agent lacks contrast resolution, therefore the test's ability to separate a kidney cyst from a solid kidney mass is far more limited than MRI. Nonetheless, CT remains a useful screening tool for heart scans which use very low amounts of radiation and yield excellent and helpful information.

Ultrasound has been used as a limited screening tool, particularly for the identification of abdominal aortic aneurysms. However, ultrasound is relatively limited in its scope in comparison to MRI. For example the spine, brain and bones cannot be assessed at all ultrasonographically. As well, even in organs that can be addressed using ultrasound the sensitivity of MRI for the identification of lesions is superior to ultrasound. Finally, in larger patients ultrasound can be very limited for all but the most superficial structures.

The questions remains, what is different about screening with MRI which makes it superior to these other screening tests? The answer is quite a lot.

Unlike other screening tests, preventative screening with MRI concentrates on those areas which have been well documented to yield the most benefit from early detection. While not every cancer benefits from early detection, many do, such as renal cell carcinoma, liver cancer & certain gynecological cancers. In addition, whole body MRI screening focuses on life-threatening illnesses such as aneurysm, stroke, and vascular disease without exposing the patient to any harmful ionizing radiation.

The Truth About Whole Body Scans

From a technological standpoint, MRI has the unique ability to clearly define structures and lesions within the body in far greater detail than ever before. The additional detail obtained using MRI makes it possible for a radiologist to classify a lesion that is detected as either benign or as a lesion requiring further investigation with contrast or using other modalities. This significantly reduces the number of false positives requiring invasive follow-up endemic to the other screening modalities.

Individuals now have the opportunity to make a significant investment in their personal health utilizing whole body screening with MRI. You now have the opportunity to be proactive with your health with a safe and comprehensive test. The information obtained will provide valuable information to your physician which can significantly impact your wellbeing today or one day in the future.