

Zilkha Radiology's introduction to MRI

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Not all MRIs are the same. There are significant differences in quality between MRIs. As you know, the engine of the MRI is the magnet. Magnet strength is measured in Tesla or "T." Magnets for the MRI come in different strengths or different "T." Different magnet strengths include the 0.3T, 1.0T, 1.5T and the most powerful of all, the ultra high field strength 3.0T MRI. Magnet strength really matters. Stronger magnets make higher quality MRIs. Higher quality MRIs produce images that are higher in resolution and detail. When images are of such high quality, your doctor can see your problem much more clearly. Let us compare images made on a 3.0T MRI scanner and images made on a weaker MRI scanner.

Here are two images from an MRI of the lumbar spine. These are two different patients. These are called axial images. Image number one is from our 3T MRI. The image labeled number two is from a weaker strength MRI. Please take a look at the portion labeled rootlets on image number one. You can easily see them on the 3T MRI. Do you really see them on the weaker MRI? This is especially important if a patient has a tu-

mor in this region. Look at the second axial T2 weighted image on image number three. See the structure labeled tumor. It is much larger than the rootlets. This tumor becomes very bright and is confirmed after we give contrast as you can see on image number four. Do you think this little tumor would be easily seen on a weaker strength MRI?

Not only are the images of higher quality, they are acquired very quickly. On the 3T MRI, a complete study is performed in 15-20 minutes. On the weaker MRI (assuming the same number of sequences and number of images), the same study can take 30-50 minutes. If you need an MRI, the 3T MRI is the way to go. It is stronger, faster, and produces superior images.

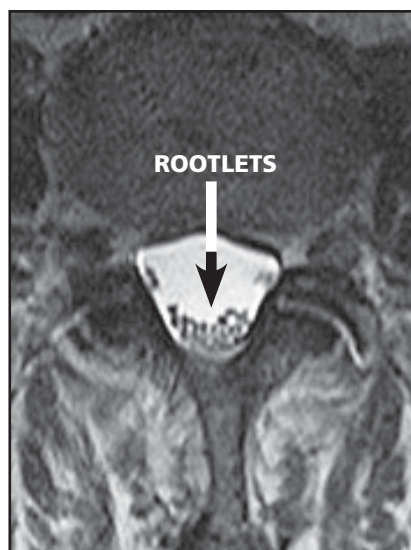
Zilkha Radiology is the first and only radiology group to have completely converted to 3T MRI technology. Our 3T MRIs have "open bore" technology which means that the opening of the MRI (where the patient rests during the MRI) is larger than the traditional "closed bore" MRIs. This translates into increased patient comfort. This scanner is ideal for the claustrophobic patient, children and patients who weigh up to 550

pounds.

Besides 3T MRI, Zilkha Radiology is equipped with multidetector CT, PET CT, digital mammography (large detector plate), ultrasound, digital x-ray, nuclear medicine, fluoroscopy (hysterosalpingograms, upper GI series, barium enemas), IVP's and DEXA scans. We do breast biopsies (MRI and ultrasound guided) and thyroid biopsies (ultrasound guided.) We also do virtual colonoscopy, CT urograms and arthrograms (MRI and CT.)

Dr. Albert Zilkha served as a Professor of Clinical Radiology at the State University of New York at Stony Brook School of Medicine. The offices of Zilkha Radiology are very easy to get to, conveniently located next to major parkways. The West Islip office is located right off of the Robert Moses causeway just across the street from Good Samaritan Hospital. The East Islip office is located just off the Heckscher Parkway adjacent to the East Islip Library. There is plenty of parking in both offices. The offices are open Monday through Friday from 7AM to 8PM and on Saturday from 8AM to 3PM.

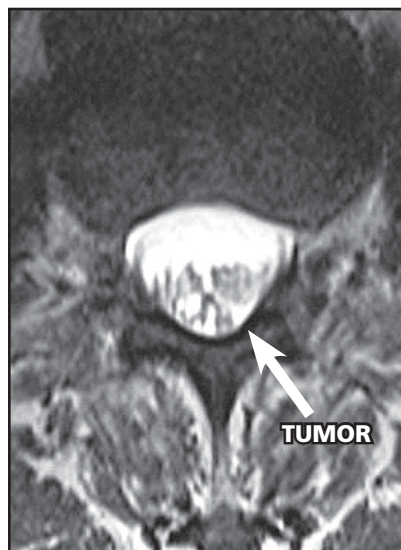
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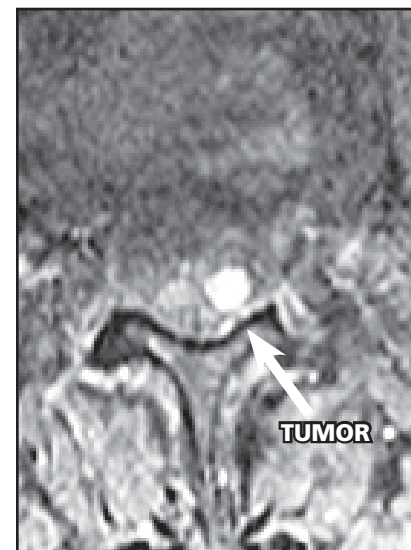
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