3 Tesla

Prior to the 3 Tesla Machine, the high-field standard was 1.5 Tesla.

The magnetic field produced by 3T Magnetom Trio MRI System yields exceptional anatomic detail. Thus, if a picture is worth a thousand words, the 3 Tesla MRI is an encyclopedia. The increased image clarity revealed by 3T is particularly beneficial for pathological conditions involving the brain, spine, and musculoskeletal system.

3 Tesla MRI MRA 16 Slice CT CTA General, Vascular, and Musculoskeletal ultrasound Digital Xray Arthrograms Mylograms

The benefits of the 3T scanner are not confined to Magnetic Resonance Imaging. The increased spatial resolution of the 3T scanner allows for high-quality vascular imaging. Thus, 3 Tesla MR Angiogram studies may often supplant the need for invasive interventional catheter studies.

Insurance companies pay the same amount for an MRI, regardless of whether your exam is performed on a low-field or high-field magnet.

3 Tesla (T) magnetic resonance imaging (MRI) improves contrast resolution in basal ganglia nuclei containing high levels of iron, because of magnetic susceptibility effects that increase significantly as the magnetic field gets higher. This phenomenon can be used for better visualization of the STN and may reduce the time necessary for detailed microrecording (MER) mapping, increasing surgery efficacy and lowering morbidity [1)].

see 3 Tesla in Epilepsy.

1)
Longhi M, Ricciardi G, Tommasi G, Nicolato A, Foroni R, Bertolasi L, Beltramello A, Moretto G, Tinazzi M, Gerosa M. The Role of 3T Magnetic Resonance Imaging for Targeting the Human Subthalamic Nucleus in Deep Brain Stimulation for Parkinson's disease. J Neurol Surg A Cent Eur Neurosurg. 2015 May;76(3):181-9. doi: 10.1055/s-0033-1354749. Epub 2015 Mar 12. PubMed PMID: 25764475.