Magnetic resonance imaging (MRI) of the brain uses a magnetic field, radio waves and a computer to create detailed image slices (cross sections) of the area. MRI technology produces better soft-tissue images than X-ray and allows the physician to evaluate different types of tissue, as well as distinguished normal, healthy tissue from diseased tissue.

**What to expect**

- **Before the exam:**
  If patients are claustrophobic (fearful of small, enclosed areas) or experience pain when lying on their back for more than 30 minutes, the physician may prescribe a relaxant or pain medication to help them through the procedure. The technologist is always able to see and hear the patient during the procedure.

  In some cases, the radiologist requests a contrast agent (dye) to improve the quality of the images. Before the exam, patients must inform the technologist, radiology nurse and/or physician if they have allergies, are pregnant or are nursing. Patients may eat and drink before the exam. The contrast agent is injected into a vein in the arm, which may cause a cool sensation. As pictures are taken, the patient must hold very still, and in some cases, hold their breath.

- **Abdomen MRI**
  - During the exam:
    The patient is positioned on the scanning table headfirst with arms at the side. Coils (special devices to improve image quality) may be placed on or around the area of the abdomen. The scanning table slides into the magnet, covering the whole body. During the scan, patients do not feel anything, but they hear intermittent humming, thumping, clicking and knocking sounds. Earplugs are provided to help mask the noise. The exam is approximately 45 to 60 minutes.

- **Brain MRI**
  - During the exam:
    For this exam, the patient is positioned on the scanning table headfirst with arms at the side. Coils (special devices to improve image quality) may be placed on or around the brain area. The scanning table slides into the magnet, covering the whole body. During the scan, patients do not feel anything, but they hear intermittent humming, thumping, clicking and knocking sounds. Earplugs are provided to help mask the noise. The exam is approximately 30 minutes.

- **Chest MRI**
  - During the exam:
    Patients having a chest MRI are positioned headfirst on the scanning table with arms at the side. Coils (special devices to improve image quality) may be placed on or around the chest area. The scanning table slides into the magnet, covering the whole body. During the scan patients do not feel anything, but they hear intermittent humming, thumping, clicking and knocking sounds. Earplugs are provided to help mask the noise. The exam is approximately 60 minutes.

- **Pelvis MRI**
  - During the exam:
    The patient is positioned on the scanning table feet first with arms at the side. Coils (special devices to improve image quality) may be placed on or around the pelvic area of the body. The scanning table slides into the magnet, covering the lower body. During the scan, patients do not feel anything, but they hear intermittent humming, thumping, clicking and knocking sounds. Earplugs are provided to help mask the noise. The exam is approximately 45 to 60 minutes.

  - **After the exam:**
    There are no post-exam instructions.