

# Magnetic Resonance Imaging (MRI)

## **What is magnetic resonance imaging (MRI)?**

Magnetic resonance imaging (MRI) is a special test that produces very clear, detailed pictures of the organs and structures within your body. The test uses a powerful magnetic field, radio waves, and a computer to create images in cross-section. While an x-ray is very good at showing bones, an MRI lets your doctor see structures made of soft tissue such as ligaments and cartilage and organs such as your brain and heart.

## **When is it used?**

Injuries show up well on an MRI. For example, an MRI may show whether you have torn ligaments or torn cartilage in your knee and help your doctor decide whether or not you need surgery. It is also useful for injuries involving the shoulder, back, or neck. Doctors use MRIs to see prob-

lems in the brain and spinal cord and to see the size and location of tumors.

## **How do I prepare for the procedure?**

No special preparation is needed. You may eat normally and take any usual medications. For the test, wear loose, comfortable clothing without metal fastenings such as zippers or clasps because metal will interfere with the test. Do not wear jewelry. If you have any metal in your body (such as plates or screws from a previous surgery) tell your doctor. If you have a pacemaker you cannot have an MRI because the test may damage it. If you have any metal fragments in your eyes you cannot have an MRI because the test may injure your eyes.

## **What happens during the procedure?**

You lie down on a cushioned bed that moves into a dough-

nut-shaped magnet that is open on both ends. If you get nervous when you are in small closed spaces you should talk to your doctor about this before you have your MRI. He or she may be able to give you a medication that will help you feel less nervous. You will have to be very still during the procedure so the pictures will not be blurry.

Most MRIs take between 30 and 60 minutes. You will hear loud knocking and a whirring sound while the pictures are being taken. You will wear earplugs or music will be provided so that the noise doesn't sound so loud.

When the test is over you may go home. Your doctor will schedule a visit with you to discuss the results.

## **What are the benefits and risks?**

An MRI is painless. There is no radiation and there are no harmful side effects.