



Magnetic Resonance Imaging (MRI) of the Prostate

Overview of Prostate MRI

This information will help you prepare for magnetic resonance imaging (MRI) of your prostate.

An MRI is a procedure that uses strong magnetic fields to produce pictures of the inside of your body. It is used to detect the type, size, and location of tumors. It is also used to check your response to treatment. Your doctor will use the detailed images of your MRI to plan your treatment.

Prostate MRI uses a special form of MRI called DCE (dynamic contrast enhanced) MRI, which looks at how your body's tissues absorb a contrast material over time. Because tumors act differently than normal tissue, this can help to pinpoint and characterize tumor activity. Sophisticated image-analysis software helps radiologists to interpret the MRI results. A prostate MRI exam also involves the use of an endorectal coil (a wire covered in a plastic tube), which helps to increase resolution in the area of the prostate gland.

Some patients cannot have a rectal coil exam. You may not be able to have the exam if you:

- Have large hemorrhoids
- Had pelvic surgery within the past 8 weeks
- Had radiation therapy to your prostate or pelvis within the past 3 months
- Have any disease of your rectum
- Have bleeding from your rectum
- Have inflammatory bowel disease

If your technologist thinks the rectal coil exam will not be possible, he or she will discuss it with you.

Preparing for Your MRI

Because the examination requires use of the endorectal coil, which is inserted into the rectum, there are some specific preparations needed for your exam.

- Please use a Fleet® enema the evening before your MRI; perform the enema according to the manufacturer's package directions. If your MRI is scheduled for the afternoon you can choose to perform the enema the evening before or the morning of the exam prior to 8 A.M.
- Eat lightly the evening before and day of the exam (for example; broth-based soups, toast, pudding, jello, or applesauce).
- You may take your medications as usual.



Additional Preparation:

- Please avoid sexual activity during the 48 hours prior to your procedure.
- If you are getting medication through a patch on your skin, remove it before entering the MRI suite. This is because any metal on the patch can heat up and cause burns during an MRI. Bring an extra patch with you to put on after your procedure.
- If it is difficult for you to lie still on your back for the approximately 40 minute duration of the MRI or if you are claustrophobic, speak with your doctor before your procedure. You may be prescribed medication to help with this. It is important to lie very still, since any motion will interfere with image quality.
- If your doctor is prescribing a sedative to take while you have your MRI, you will need to arrive early to complete consent paperwork, and you will need to have someone 18 years or older to drive you home afterward.

Before your MRI, you will fill out a questionnaire about any medical implants or devices you may have. If you have a medical implant or device, ask your doctor to tell you the exact type and manufacturer. Because there are so many different devices, it is important that you have this information before you arrive for your procedure. If you don't have the information about the safety of your device, you may not be able to have your procedure.

The Day of Your Procedure

Please check in at registration 30 minutes before your scheduled time so we may verify MRI safety with you. Once you are checked in, you will change into a hospital gown before going into the scanning area. You will place your clothes and any metal objects (such as jewelry, coins, or glasses) into a locker. You should also place any credit, ATM, or debit cards in the locker. The MRI magnet will erase the information on the magnetic strip on these cards.

After you secure all of these items in the locker, you will be shown into the scanning room and helped onto the MRI table. The MRI scanner is a large, donut-shaped magnet. You will lie on your back on the scanner table. Because a prostate MRI exam requires the use of contrast, the technologist will place an IV in your arm prior to your going into the scan. A physician radiologist or the technologist will insert the endorectal coil and the technologist will position the table so that your pelvis is in the middle of the large cylindrical magnet. The scanner makes a constant tapping noise while the images are taken. Your technologist will offer you earplugs or earphones so that you can listen to music. During your procedure, your technologist will take a number of different images of your prostate gland. After the scan is completed, you will be helped off the MRI table. After you get your belongings, you may leave the MRI suite.

An MRI of the prostate lasts about 40 minutes. During the exam, you will lie feet-first on your back, in the center of the MRI scanner. The unit is open at the end and there is a 2-way intercom system so that you can talk to the technologist. You can also listen to music while you are in the scanner.



After Your Procedure

- You may eat and drink as usual
- Your radiologist will send a report to your doctor. The results of your procedure will be used with other test results to plan your care.