

## MRI Prostate Imaging with eCoil

### Patient Information Guide

This guide covers what you need to know to get the best MRI exam of your prostate. The guide includes:

- A description of MRI of the prostate with eCoil exams
- How to prepare for your MRI of the prostate with eCoil exam
- What to expect during the exam
- What happens after your MRI prostate with eCoil exam
- The MRI safety screening process

Please use this guide to answer questions you might have about MRI prostate exams with eCOIL. Someone from the MRI staff will call you a few days before your exam to answer questions and talk about how to prepare for your exam.

#### Medical Words Used in this Guide

Some words in this guide might be new to you. Let's go over what those words mean.

**Endorectal Coil:** A small rubber tube that is inserted in the rectum and helps make the prostate easier to see in the images.

**Intravenous (I/V) Contrast Agent:** A substance used to enhance the visible contrast of structures or fluids within the body in medical imaging. It is administered to your veins through a tube that is inserted in your arm.

**Magnetic Resonance Imaging (MRI):** A type of imaging exam where patients are put into a large magnet that is connected to a computer. The magnet sends a signal to special coils that are placed like a blanket on the part of the body that doctors want to look at. The magnet signal passes through the coils and is picked up by the computer. The computer converts the signal into the pictures the doctors will use to look at your bowel.

**Prostate:** The prostate gland is part of the male reproductive system. It is located in front of the rectum and below the bladder.

#### Important Contact Info

If you have any questions or concerns about your MRI prostate with eCOIL exam or what is in this guide, call the MRI Department at 617-732-7970.

#### What is MRI of the prostate with eCoil?

MRI prostate imaging with eCoil is a non-invasive medical exam that helps doctors diagnose conditions of the prostate. The exam is performed in an MRI scanning machine. An MRI scanner is a large cylinder-shaped tube surrounded by a circular magnet. Just before the exam starts, the eCoil, which is a small

rubber tube, will be placed in your rectum. During the exam, you will lie on a table that an MRI technologist slides into the center of the magnet to obtain images of your prostate.

### **How do I prepare for MR Imaging of the prostate with eCoil?**

There are no special prep instructions for this exam.

It is important that you arrive 1 hour prior to your scheduled appointment to complete the MRI safety screening and to have an I/V line inserted into your arm. The contrast agent will administered through the I/V line. You should always empty your bladder as often as you need to.

### **What should I expect during the exam?**

MRI of the prostate with eCoil exams last about 45-60 minutes. Some patients experience a small bit of discomfort when the technologist inserts the eCoil into the rectum.

When it is time for your exam, an MRI technologist will bring you into the scanning room where you will lie on your side on the MRI table. A doctor will perform a digital rectal exam with a numbing gel. Next, the doctor will insert the eCoil into your rectum. Patients sometimes describe feeling discomfort when the eCoil is inserted.

You may be given a small injection in your arm to relax the muscles in the colon. This will help improve image quality.

With the eCoil inserted, you will lie on your back. A special set of signal detectors, called an imaging coil, will be placed on your pelvis like a blanket. The imaging coil works with the magnet and the eCoil to produce the images of your prostate.

Next, the technologist will slide the exam table into the scanner so that you are in the correct location in the scanner. The technologist will go into the control room next to the scanner room. Through a window, the technologist will keep watch as the exam takes place. You can signal the technologist with a call button or through the intercom system.

The scanner will make a series of loud clanging sounds as it takes the pictures. You will be given ear plugs or headphones to lessen the noise.

The technologist will communicate with you from the control room. You will be told to “hold your breath” or “relax” at certain times during the scan.

Partway through the exam, the technologist will come back into the room to give you the injection of I/V contrast agent. You might experience a cool sensation in your arm. After the injection, the technologist will return to the control room to finish the scan.

When the scan is done, the technologist will remove the eCoil and I/V line. You will be helped off the table and into the changing room.

**Are there any risks associated with MR prostate imaging with an eCoil?**

There are no known risks associated with MR prostate imaging with eCoil.

**What happens after an MR prostate imaging with eCoil exam?**

When the exam is complete, you will be escorted back to the changing room. After you have changed your clothes, you will be able to leave the MRI department and return to your normal activities. The radiologist will send a report of the results of your exam to your doctor. Your doctor will discuss the results with you.