



BATH RADIOLOGY

Magnetic Resonance Cholangiopancreatography (MRCP)

Patient Information Leaflet

Introduction

This leaflet tells you about Magnetic Resonance Cholangiopancreatography (MRCP), a test to look at your bile ducts. It explains how the test is done, what to expect, and the risks involved. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

What is MRCP?

Magnetic Resonance Cholangiopancreatography (MRCP) is a Magnetic Resonance Imaging (MRI) scan that produces detailed images of the gallbladder, bile ducts and pancreatic duct. It is particularly useful to identify gallstones within the gallbladder or bile ducts, or visualize strictures (narrowings) or obstruction of the ducts.

An MRI (Magnetic Resonance Imaging) scanner is a short tunnel that is open at both ends. It uses a powerful magnet, radiowaves and a computer to produce images of the internal structure of the body. MRI does not use ionizing radiation (x-rays).

The scanner is operated by a Radiographer, who is a professional trained to carry out X-rays and other imaging procedures. The pictures are displayed on a computer workstation for examination by the Radiologist, who is a doctor specially trained to interpret the images and carry out more complex imaging examinations.

Are there alternatives to MRCP?

Endoscopic Retrograde Cholangiopancreatography (ERCP) is an alternative ways of looking at the gallbladder, bile ducts and pancreatic duct. ERCP is a more invasive procedure than MRCP and may require intravenous sedation. ERCP involves passing an endoscope (a long, flexible tube that contains a light source and a video camera) through the oesophagus and stomach into the duodenum in order to pass a fine tube (cannula) into the bile duct or pancreatic duct. Contrast is injected through the cannula into the ducts in order to visualize them on X-rays. The risks of ERCP include inflammation of the pancreas (pancreatitis), perforation of the pancreatic or bile ducts and the risks associated with intravenous sedation and ionizing radiation (X-rays).

What do I have to do before my MRCP?

Dietary preparation.

Usually you will be instructed not to eat or drink for several hours prior to your MRCP. However, guidelines about eating and drinking before the procedure vary at different hospitals and you should follow the instructions you are given with your appointment letter.

Taking tablets and medicines

You should continue to take all your normal medication unless you are diabetic taking insulin. If you are diabetic using insulin, please contact the Radiology department for advice.

Females

Females are asked to contact the Radiology department if you suspect that you may be pregnant. There is no evidence that MRI is unsafe in pregnancy, but as a precaution, we do not perform MRI on pregnant ladies unless it is essential.

MRI Safety Questionnaire

The magnetic field used for MRI scans is very strong and can affect metal or electronic implants. Please take time to read through and complete the attached MRI Safety questionnaire, which asks about any metal implants, such as artificial joints and stents, or electronic devices, such as a pacemaker, that you may have inside you. If all of the answers are no then please bring the completed questionnaire to your appointment. If, however there are answers that are yes, then please return the completed questionnaire immediately to the Radiology department or telephone the MRI appointments desk for advice.

Where do I go when I arrive at the hospital?

Please report to the reception desk in the Radiology department with your appointment letter. You will need to arrive at least 45 minutes before your appointment for preparation.

A member of the team will explain the test and answer any questions.

You will be shown to a private cubicle and asked to change into a clean gown. You may be allowed to wear your own clothing if it is loose-fitting and has no metal fasteners, zips or buckles. Please do not wear items of jewellery, as they may need to be removed prior to the scan. Your clothes and valuables will be secured in a locker until after the procedure.

Can I bring a relative/friend?

You may bring a relative or friend with you to the appointment but, for reasons of safety, they will not be able to accompany you into the examination room, except

in very special circumstances. If the patient is a young child or is un-cooperative, a parent or health worker may stay in the scanner room.

If you need an interpreter please tell us when you receive your appointment so that we can arrange this.

Please let us know when you arrive for your test if you have any of the following

- Diabetes
- Kidney disease
- Known allergies

What happens during MRCP?

You will be taken into the MRI Scanning Room and asked to lie down on the moveable scanner table, which is moved into the scanner. A receiving device will be placed around your abdomen. The MRI scan will then be performed and takes approximately 10-15 minutes to complete. You will be asked to remain still and hold your breath for short periods whilst the scans are taken. At certain times during the procedure, the MRI scanner will make a loud knocking noise caused by the magnets in the machine being turned on and off. You may be given earplugs or headphones to wear.

Occasionally a contrast material may be required during the examination. This will require a small tube, called a cannula, to be inserted into one of the veins in your arm. Additional scans will be performed after the contrast has been administered.

You will be alone in the MRI room during the scan but the Radiographer will be able to see, hear and speak with you at all times.

What happens after the test?

You may eat and drink as normal as soon as the examination is finished. Normal activities may normally be resumed as soon as the scan is finished.

Are there any risks?

MRCP is generally regarded as a very safe test. It is non-invasive and does not involve ionizing radiation. There is no known adverse effect of the magnetic field and radio waves used in MRI on living tissues.

A small proportion of people (2 – 5 %) find MRI examinations difficult because of the partly enclosed nature of the scanner, causing claustrophobia. This is less of a problem for rectal MRI exams than for some other MRI exams, because your head is near the opening of the magnet. Occasionally, mild sedation (relaxing tablets or injections) may be given to patients who know that they will find the close

surroundings of the magnet uncomfortable. This treatment reduces the anxiety about being in a confined space. If you are given a sedative injection, a plastic peg will be put on one of your fingers so that your pulse and breathing can be monitored throughout the examination. You are advised not to drive, travel alone or return to work for the rest of the day. If you know that you will need a sedating injection for the MRI exam, please arrange for someone to accompany you home after the test.

There is a slight risk of an allergic reaction if contrast material is injected. A Radiologist or other clinician will be available to assist if you experience any symptoms of an allergic reaction. Such reactions are usually mild and easily controlled by medication.

Despite these slight risks, your doctor believes it is advisable that you should have this examination, and do bear in mind there are greater risks from missing a serious disorder by *not* having your scan.

How do I get my results?

A specialist radiologist will review the images from your MRCP and send a report to your doctor. Your GP or hospital Consultant who referred you for the test will see you to discuss the results.

Any further questions?

We will do our best to make your visit as comfortable and stress free as possible. If you have any further questions, or suggestions for us, please let us know.

If you would prefer information and advice in another language, please contact the Radiology department.

Further Information

For general information about Radiology departments, visit The Royal College of Radiologists' website: www.goingfora.com

For health advice or information you can call NHS Direct on 0845 4647 or visit the website: www.nhsdirect.nhs.uk

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