

How to Read Your Magnetic Resonance Cholangiopancreatography (MRCP) Radiology Report

Your healthcare provider (usually a doctor, nurse practitioner, or physician assistant) uses medical imaging tests to diagnose and treat diseases. A radiologist is a doctor who supervises these exams, reads and interprets the images, and writes a report for your healthcare provider. This report may contain medical terminology and complex information. If you have any questions, be sure to talk to your provider or ask if you can speak to a radiologist (not all imaging centers make their radiologists available for patient questions).

- What is MRCP commonly used for? (http://www.radiologyinfo.org/info/how-to-read-your-mrcp#18d6e113ce64470e87014cb5a7cb49e1)
- Sections of the Radiology Report (https://www.radiologyinfo.org/en/info/article-read-radiology-report#8337220f26a347afbccd43101bc6ac48)
- Additional Information (https://www.radiologyinfo.org/en/info/article-read-radiology-report#71f4fb75ed904d37b7c638152f3e8191)

What is MRCP commonly used for?

Doctors typically use this procedure to help diagnose diseases such as:

- Diagnose diseases of the liver, gallbladder, bile ducts, pancreas, and pancreatic duct. These may include tumors, stones, inflammation, or infection.
- Evaluate pancreatitis (https://www.radiologyinfo.org/en/info/pancreatitis) to detect the underlying cause. In patients with pancreatitis, an MRCP may be performed using a medication called Secretin to assess for long-term scarring and to determine the amount of healthy pancreatic function and secretions.
- Determine the cause of unexplained abdominal pain

An MRCP can also provide a noninvasive alternative to endoscopic retrograde cholangiopancreatography (ERCP). ERCP is a diagnostic procedure that combines endoscopy (http://www.radiologyinfo.org), which uses an illuminated optical instrument to examine inside the body, with iodinated contrast injection and x-ray images. ERCP is an invasive procedure that evaluates the bile ducts and/or the pancreatic duct.

For more information, see the MRCP page (https://www.radiologyinfo.org/en/info/mrcp).

Sections of the Radiology Report

Type of exam

This section usually shows the date, time, and type of exam. This is usually dictated by your symptoms or needs.

Example:

• MRCP without intravenous contrast performed January 10th, 2023.

History/Reason for exam

This section usually lists the information that your ordering provider has listed for the radiologist when they ordered your exam. It allows your ordering provider to explain what symptoms you are having and why they are ordering the radiology test. This helps the Radiologist accurately interpret your test and focus the report on your symptoms and past medical history. Sometimes the radiologist who reads your exam will also add information that they find in your chart or in the forms that you fill out before your imaging test.

Example:

• 64-year-old male with a history of pancreatitis and new pain.

Comparison/Priors

If you have had relevant prior imaging exams, the radiologist will compare them to the new imaging exam. If so, the radiologist will list them here. Comparisons usually involve exams of the same body area and exam type. It is always a good idea to get any prior imaging exams from other hospitals/facilities and give them to the radiology department where you are having your test. Having these older exams can be very helpful to the radiologist. In some cases, simply having your prior test available will make a difference in what the radiologist recommends if they see something on your scan. The prior exam can help show if a previous finding is unchanged or if there is a new finding.

Example:

• Comparison is made to a MRCP performed August 24, 2018.

Technique

This section describes how the exam was done and whether contrast was used. Because this section is used for documentation purposes, it is not typically useful for you or your doctor. However, it can be very helpful to a radiologist for any future exam if needed.

Example:

• MRCP was performed using heavily T2-weighted sequences in the axial and coronal planes, with thick-slab and thin-slice acquisitions. 3D MRCP images were generated with maximum intensity projection (MIP) and multiplanar reformats for evaluation of the biliary and pancreatic ducts.

Findings

This section lists what the radiologist saw in each area of the body in the exam. Your radiologist notes whether they think the area is normal, abnormal, or potentially abnormal. Sometimes an exam covers an area of the body but does not discuss any findings. This usually means that the radiologist looked but did not find any problems to tell your doctor. Some radiologists will report things in paragraph form, while others use a reporting style where each organ or region of the body is listed as a line with the findings. If the radiologist does not see anything concerning it may say "normal" or "unremarkable."

Example:

- Liver: Normal in size and contour. No focal hepatic lesions. Signal intensity normal. No intrahepatic ductal dilation.
- Gallbladder: Normal distention and wall thickness. No gallstones or pericholecystic fluid.
- Common Bile Duct: Normal caliber (~5 mm), no ductal dilation or filling defects.

- Intrahepatic Ducts: Normal caliber. No stricture or obstruction.
- Pancreas: Normal size and signal. No masses. Main pancreatic duct is normal in course and caliber (~1.7 mm).
- Ampulla/Vater region: No obstructing lesion or filling defect seen.
- Spleen, kidneys, and adrenal glands: Visualized portions are unremarkable.
- No ascites or lymphadenopathy.

Impression

In this section, the radiologist summarizes the findings and reports the most important findings that they see and possible causes for those findings. It also has recommendations for any follow-up actions. This section offers the most important information for decision-making. Therefore, it is the most important part of the radiology report for you and your healthcare team. For an abnormal finding, the radiologist may recommend:

- Other imaging tests that can help better assess the finding or getting a follow-up imaging test to re-evaluate at the finding after a period.
- Biopsy.
- Combining the finding with clinical symptoms or laboratory test results.
- Comparing the finding with any other imaging studies that the radiologist interpreting your test does not have access to. This is common when you have imaging tests done at different facilities or hospitals.

For a potentially abnormal finding, the radiologist may make any of the above recommendations.

Sometimes the report does not answer the clinical question, and more exams may be needed. More exams may be necessary to follow up on a suspicious or questionable finding.

Example:

- No findings on the current MRCP to account for the patient's clinical complaint of abdominal pain.
- There is a new 2 cm lesion in the pancreas which is indeterminate (cannot be definitively diagnosed by the study).
- **RECOMMENDATION:** Given the patient's history of pancreatitis, an MRI of the pancreas is recommended to better characterize the indeterminate pancreas lesion to exclude the possibility of malignancy.

Incidental Findings

When your doctor orders a radiology exam for you, they are hoping to answer a specific diagnostic question or to eliminate a diagnostic possibility. An x-ray, for example, is one of the quickest ways to determine if the sore toe you stubbed is broken or if it is merely bruised.

Radiology exams can capture information that may be unexpected but important, nonetheless. This information, called an incidental finding, may have no bearing on your health at all. Or it could be concerning enough to your doctor to prompt them to investigate.

Some of the more common incidental findings for this exam are:

- Simple hepatic cysts: "Incidental simple hepatic cysts noted, without suspicious features."
- Pancreatic cysts / side-branch IPMN: "Small incidental pancreatic cyst(s) identified, likely side-branch IPMN, without high-risk stigmata."
- Renal cysts: "Incidental simple renal cyst(s) without suspicious features."

However, there are many other possible incidental findings that may be included in your report. Talk to your doctor if you have questions. Incidental findings are not always bad news and may not require any action. For example, that x-ray of your stubbed toe may show that you broke a different toe in the past that is now healed. Incidental findings are just information that may or may not already be known. What you and your doctor do with that information will determine if further testing or treatment is needed.

Additional Info

Once the report is complete, the radiologist signs it, and sends the report to your doctor who will then discuss the results with you. The doctor may upload the report to your patient portal before they call you. If you read the report before talking to your doctor, don't make assumptions about the report's findings. Something that seems to be bad often turns out not to be a cause for concern.

Sometimes, you may have questions about your report that your doctor cannot answer. If so, talk to your facility's imaging staff. Many radiologists are happy to answer your questions.

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