How to Read Your Radiology Report

Your doctor sometimes uses medical imaging to diagnose and treat diseases they think you may have. A radiologist is a doctor who supervises these exams, reads and interprets the images, and writes a report for your doctor. This report may contain complex words and information. If you have any questions, be sure to talk to your doctor or your radiologist.

Electronic Health Records

The radiologist writes the report for your doctor who ordered the exam. Typically, the report is sent to this doctor, who then delivers the results to you.

Many patients can read their electronic health records online. Sometimes, these records include radiology reports. Online access to your health records may help you make more informed decisions about your healthcare. In addition, online access lets you share your radiology reports with other doctors electronically. This may increase the safety, quality, and efficiency of your care.

Sections of the Radiology Report

Type of exam

This section shows the date, time, and type of exam.

Example:

- Computed tomography (CT) of the abdomen and pelvis with intravenous and oral contrast performed January 10th, 2014.

Clinical history

This section contains personal information, such as your age, gender, and relevant medical information. This may include any known diseases and symptoms you may be feeling. If the radiologist knows or suspects a diagnosis, they will list it here. This section will also list the reason for the exam, or the question your doctor is asking. This information helps your radiologist focus the report on your unique condition.

Example:

- 64-year-old female with a history of breast cancer and new onset abdominal pain.

Comparison

Sometimes, the radiologist will compare the new imaging exam with any available previous exams. If so, the doctor will list them here. Comparisons usually involve exams of the same body area and exam type.

Example:
• Comparison is made to a CT scan of the abdomen and pelvis performed August 24, 2013.

Technique

This section describes how the exam was done and whether contrast was used. Because it is used for documentation purposes, this section 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:
• 5 mm axial images from the lung bases through the pubic symphysis were acquired following the administration of intravenous and oral contrast. Coronal and Sagittal reformatted images were constructed from the source data.

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 to be 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.

Example:
• Lung bases: No pulmonary nodules or evidence of pneumonia.
• Cardiac: Base of heart is within normal limits. No pericardial effusion.
• Liver: Normal size and contour. There is a new 2 cm hypodense focus in segment 8. Gallbladder is surgically absent.
• Biliary: No intra or extrahepatic biliary dilation.
• Spleen: No splenomegaly.
• Pancreas: No mass or ductal dilation.
• Kidneys and Adrenals: No masses, stones or hydronephrosis. No adrenal nodules.
• Lymph nodes: No lymphadenopathy.
• Bowel: No dilation or wall thickening.
• Bladder: Within normal limits.
• Uterus and Adnexa: The uterus and bilateral ovaries are within normal limits for age.
• Bones: No aggressive osseous lesions. Degenerative changes are present in the spine.
• Soft Tissues: Bilateral fat and bowel containing inguinal hernias are again noted.
• Other: No free fluid within the pelvis.

Impression

In this section, the radiologist summarizes the findings. The section lists your clinical history, symptoms, and reason for the exam. It will also give a diagnosis to explain what may be causing your problem. 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 doctor.

For an abnormal finding, the radiologist may recommend:
• more imaging.
• biopsy.
• combining the finding with clinical symptoms or laboratory test results.
• comparing the finding with prior imaging studies not available when your radiologist looked at your images.
For a potentially abnormal finding, the radiologist may make any of the above recommendations. The radiologist may also recommend repeating the same imaging later to see whether there is any change in the area.

If the exact clinical diagnosis is not possible, the radiologist may list a few answers that have similar findings but require more input from other tests. This is a list of possible diagnoses based on the imaging findings and your clinical history.

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:

1. No findings on the current CT to account for the patient's clinical complaint of abdominal pain.
2. There is a new 2 cm lesion in the liver which is indeterminate (cannot be definitively diagnosed by the study).
3. RECOMMENDATION: Given the patient's personal history of breast cancer, an MRI of the liver is recommended to better characterize the indeterminate liver lesion to exclude the possibility of metastases (or cancer spread).

Additional Information

Once the report is complete, the radiologist signs it, and sends the report to your physician. Your doctor will then discuss the results with you. The doctor may also upload the report to your online electronic health record where you may read it.

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

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