Understanding Radiology

Your Radiologist

Your radiologist is a medical doctor who specializes in diagnosing and treating disease and injury through the use of medical imaging techniques such as x-rays, computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), fusion imaging, and ultrasound. Because some of these imaging techniques involve the use of radiation, adequate training in and understanding of radiation safety and protection is important.

Your radiologist has graduated from an accredited medical school, passed a licensing examination, and completed a residency of at least four years of unique postgraduate medical education in, among other topics:

- Radiation safety/protection
- Radiation effects on the human body
- Appropriate performance and interpretation of quality radiologic and medical imaging examinations

The majority of radiologists also complete a fellowship of one to two additional years of specialized training in a particular subspecialty of radiology, such as breast imaging, cardiovascular radiology or nuclear medicine.

Your Radiologist Plays a Key Role in Your Healthcare By:

- Acting as an expert consultant to your referring physician (the doctor who sent you to the radiology department or clinic for testing) by aiding him or her in choosing the proper examination, interpreting the resulting medical images, and using test results to direct your care.
- Treating diseases by means of radiation (radiation oncology) or minimally invasive, image-guided therapeutic intervention (interventional radiology).
- Correlating medical image findings with other examinations and tests.
- Recommending further appropriate examinations or treatments when necessary and conferring with referring physicians.
Directing radiologic technologists (personnel who operate the equipment) in the proper performance of quality exams.

Your Radiologist Has the Right Training, Knowledge, and Experience

When your referring doctors tell you they have reviewed your studies, what they usually mean is that they have reviewed the radiology report or gone over the study with your radiologist.

Radiologists are at the forefront of imaging technology, spearheading the development and implementation of CT, MRI, PET, and fusion imaging as well as minimally invasive procedures such as endovascular treatment of aneurysms and tumors, percutaneous biopsies, and pinpoint radiation therapy.

Radiologists are usually board certified by the American Board of Radiology (for a medical doctor) or the American Osteopathic Board of Radiology (for an osteopathic doctor), an indication of a high level of training and demonstrated excellence in the field.

What You Should Know About Quality and Safety in Medical Imaging

Radiologic procedures such as CT, MRI, and PET are medically prescribed and should only be performed by appropriately trained and certified physicians under medically necessary circumstances.

Radiologists are medical doctors who have received at least four years of unique, specific, post-medical school training in radiation safety, the optimal performance of radiological procedures, and interpretation of medical images. Other medical specialties mandate far less imaging education, ranging from a few days to a maximum of 10 months. Use of medical imaging procedures by unqualified providers may needlessly expose you to radiation or radiation levels that could be unduly hazardous. It may also result in misdiagnosis or problems that are not diagnosed at all.

ACR Accreditation

Insist that any facility providing your medical imaging care be accredited by the American College of Radiology (ACR). ACR accreditation ensures that the physicians supervising and interpreting your medical imaging meet stringent education and training standards. ACR accreditation also signifies that the imaging equipment is surveyed regularly by qualified medical physicists to ensure that it is functioning properly, and that the technologists administering the tests are certified. To locate a medical imaging or radiation oncology provider in your community, you can search the ACR-accredited facilities database.

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