

ABOUT PACIFIC MEDICAL CENTERS AND INLAND IMAGING

At Pacific Medical Centers and Inland Imaging, our advanced technology, subspecialized radiology expertise, and deep commitment to your health means you'll get answers you can trust and care you can count on.

SCHEDULING:

206.326.6500

www.PacMed.org/Schedule

LOCATIONS:

Visit www.PacMed.org for a list of our locations.



Answers you can trust and care you can count on.



NEUROLOGICAL IMAGING

for the Brain, Spine,
Head and Neck

NEUROLOGICAL IMAGING

Neuroradiology is a special field of radiology focusing on diagnostic imaging of diseases and injuries of the brain, spine, head and neck. Neuroradiologists are physicians specially trained in diagnostic imaging of neurologic conditions such as trauma, stroke, tumors, degenerative disorders, vascular malformations and aneurysms of the brain, as well as disorders of the spine such as traumatic injury and degenerative disease.

We are dedicated to providing the highest-quality imaging of neurological diseases, as well as image-guided interventions in the treatment of these diseases. Our fellowship-trained neuroradiologists frequently consult directly with other clinical specialists including neurologists, neurosurgeons, spine surgeons and head and neck surgeons.

DIAGNOSTIC SERVICES

Computed Tomography

Computed Tomography (CT) uses special X-ray equipment to obtain multiple images from different angles and then joins them together using computer technology to show a cross-section of body tissues and organs. CT scanning provides more detailed information about head injuries, stroke, brain tumors and other brain diseases than plain X-ray films. CT shows bone, soft tissues and blood vessels in the same image, which is useful in detecting abnormalities and planning treatment.

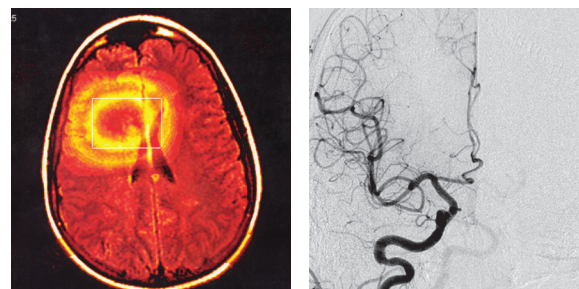


MRI images of the brain, neck and spinal soft tissue are clearer and more detailed than other imaging methods, enabling the detection of abnormalities that might be obscured by bone on a CT or X-ray. MRI is the most sensitive exam for brain tumors, strokes and chronic disorders of the nervous system such as multiple sclerosis. In addition, it is a useful means of discerning brain abnormalities in patients with dementia, and is commonly used for patients with disease of the pituitary gland as well as many other brain disorders.

MRI is also an excellent method of obtaining clear, detailed images of the structures of the spine, including the spinal cord. Perhaps the most common reason for spinal MRI is to detect bulging, degenerated or herniated intervertebral disks—a frequent cause of severe lower back pain and sciatica.

MR angiography (MRA) is an MRI study of the blood vessels. It utilizes MRI technology to detect, diagnose and aid in the treatment of brain disorders, stroke and blood vessel diseases. Many patients with arterial disease can now be treated in the radiology department rather than undergoing surgery in an operating room.

MRI technology can detect, diagnose and aid in the treatment of brain disorders, stroke and blood vessel diseases.



CT uses special X-ray equipment to obtain multiple images from different angles.

CT angiography (CTA) is an exam that is used to visualize blood flow in arteries and veins throughout the body. This exam is used to screen patients for arterial disease (blocked arteries) and to identify aneurysms (ballooning) or vascular malformations (vascular tangles) inside the brain, neck and spine. CT angiography is increasingly employed in the evaluation of patients with acute stroke.

Magnetic Resonance Imaging (MRI)

Magnetic Resonance Imaging does not use X-rays or radiation. Instead, a combination of common radio waves and a magnetic field are used to obtain the images.



MRA can be used to screen asymptomatic patients with a family history of arterial aneurysm, a ballooning of a vessel wall. If an aneurysm is found, it often can be treated before serious bleeding occurs.

MR venography (MRV) also utilizes MRI technology and is highly accurate at showing blood flow in the veins of the head and neck.

Treatments

There are also a variety of needle procedures performed by radiologists to treat diseases and injuries of the brain, spine, head and neck. These include facet and epidural steroid injections, nerve root blocks and steroid injections of the lumbar spine.

ASK YOUR DOCTOR

We are constantly investing in the latest neuroimaging technology to provide patients with access to the highest-quality services. Several neuroimaging modalities have been discussed in this brochure. We encourage you to talk to your health care provider about which one may be best for you.