

About Inland Imaging Arizona

Utilizing state-of-the-art technology and specialized clinical expertise, Inland Imaging provides critical medical imaging information used by physicians and their patients.

Choosing to have your exam done at Inland Imaging gives you access to our team of compassionate physicians and staff, where your unique needs and concerns are at the center of our care. We value the trust that you have placed in us and are pleased to answer any questions you may have at any time.

Location

Inland Imaging Arizona

2940 East Banner Gateway Drive
Suite 150
Gilbert, AZ 85234

Scheduling

480.543.6900



NEUROLOGICAL IMAGING

*for the Brain, Spine,
Head & Neck*



Trusted Medical Imaging

Neurological Imaging

Neuroradiology is a sub-specialized 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. Inland Imaging physicians and staff 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 (CT)

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 in planning treatment.

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.

CT Perfusion is a CT technique which evaluates blood flow to the brain. This technology allows the neuroradiologist to detect portions of the brain with impaired blood flow and is most often used in providing critical information on acute stroke patients.

NEUROLOGICAL IMAGING

Magnetic Resonance Imaging (MRI)

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

MRI images of the brain, neck and spine soft tissues 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 it 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 now have treatment in the radiology department rather than undergoing surgery in an operating room.

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 spectroscopy (MRS), is an application of MRI technology that generates a plot representing the chemical composition of a region of the brain rather than generating a picture. It is a special technique used to characterize the biochemistry of tumors, infarcts, and other pathology. MR spectroscopy may be a useful addition to conventional MRI to distinguish tumors, strokes and other diseases.

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

Myelography

The purpose of a myelogram is to evaluate the spinal cord and nerve roots for suspected disease or compression. In most cases, myelography is used after other studies, such as MRI or CT, when they have not yielded enough information to confirm a diagnosis. Other conditions that may

be diagnosed using myelography include arthritic bony growths (spurs), narrowing of the spinal canal, (spinal stenosis), or malformations of the spine.

Interventional Neuroimaging procedures

Interventional radiologists are specially trained doctors who use x-rays and other imaging techniques to 'see' inside the body while they guide very small instruments through blood vessels to the site of a problem, treating a variety of medical disorders without surgery. Procedures performed by interventional radiologists (IRs) are less traumatic to the patient, involving smaller incisions, less pain and shorter hospital stays.

Complimenting our full range of diagnostic neuroimaging procedures, Inland Imaging physicians also work to open arteries when narrowed to prevent stroke, close arteries to



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tumors and aneurysms, and treat pain for spine fractures and arthritis. In addition, they provide carotid angiography, cerebral angiography and carotid treatment services.

Ask Your Doctor

Inland Imaging is 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 doctor about which modality may be best for you.

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Inland Imaging
ARIZONA

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