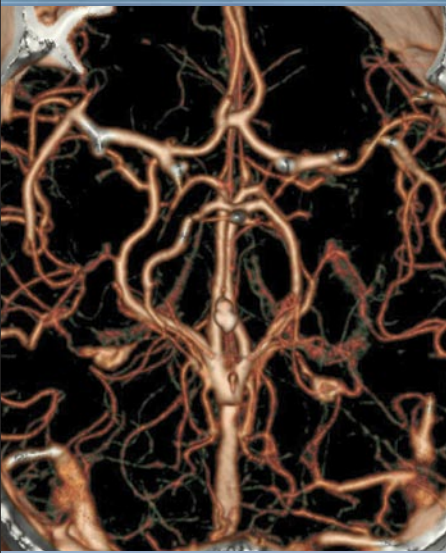


NEURORADIOLOGY



 **Valley Radiologists**
Complete Diagnostic Imaging
an affiliate of Southwest Diagnostic Imaging Ltd.

Neuroradiology is an imaging subspecialty focused on diagnosing conditions in the brain, spine and soft tissues of the neck. With today's powerful and versatile imaging modalities, radiologists are now better able to help neurologists and neurosurgeons diagnose a broad spectrum of conditions — everything from nerve-root compression in the spine to vascular occlusion in the

brain. Often, accurate interpretation of these test results can spot potentially disastrous problems early, allowing for the most effective medical intervention. At Valley Radiologists, our board-certified and subspecialized neuroradiologists work closely with physicians to select the exams that will provide the most useful images... and the most thorough and accurate diagnoses.



COMPREHENSIVE CAPABILITIES PROVIDE REAL HOPE FOR NEUROLOGIC CONDITIONS.

Because they are able to assess cognitive and physiologic activity in the central nervous system, MRI, CT and PET are fast becoming routine methods of evaluating and diagnosing neurologic disease. Also, with their unique methods of acquiring images, each modality provides its own advantages in the assessment and diagnosis of various neurologic disorders.

MRI — Magnetic resonance imaging's outstanding, clear images make it possible to map parts of the brain that handle essential functions and to identify small anatomic

changes. MRI helps our neuroradiologists distinguish normal neuronal tissue from diseased tissue, determine the extent (and age) of cerebral infarction and assess the potential risk of neurosurgical intervention. MRI also helps us plan treatment, evaluating the efficacy of certain therapies and — with increasing usefulness — predicting the course of disease.

CT — With its ability to very precisely image anatomic structure, computed tomography is an essential diagnostic tool for neurologic conditions. It is increasingly used to help physicians locate traumatic brain injury, detect blood clots or bleeding involved in stroke, detect bleeding from ruptured aneurysms and identify enlarged

ventricles in patients who have hydrocephalus. CT is also invaluable for assessing bone and soft-tissue damage resulting from facial trauma and detecting vertebral injury. In addition, CT is well-suited for evaluating the paranasal sinuses and soft tissues of the neck.

PET/CT – Positron emission tomography helps our neuroradiologists assess and categorize memory disorders of undetermined cause. It also helps evaluate suspected or proven brain tumors or seizure foci that are unresponsive to medical therapy. PET is especially adept at differentiating primary neurodegenerative dementias from other causes of cognitive decline, such as Alzheimer's disease. With PET/CT, we're able to combine PET's metabolic data with CT's precise anatomic detail for a powerful, highly useful image that helps us locate metabolic abnormalities within their true anatomic context.

Head & neck tumors – CT, MRI and PET are very useful in identifying the presence of tumors in the head and neck. CT with intravenous contrast agent can provide accurate information regarding tumors and additional pathology in the neck. MRI is particularly useful in evaluating the skull base, orbits and salivary glands. In addition, MRI is useful in patients for whom CT is contraindicated, such as those with a contrast dye allergy or an elevated creatine level from renal failure. By improving the sensitivity and specificity of localization and staging of head and neck tumors, PET serves as an outstanding complementary tool to both CT and MRI. In addition, PET's metabolic information can significantly increase the accuracy of diagnosing the recurrence of head and neck cancer.

MR angiography (MRA) – The field of neuroradiology has evolved excellent noninvasive imaging approaches to the vessels of the head and neck. Conditions that once would have required catheter angiography for diagnosis — aneurysms, vascular malformations and tumors of the

brain, spine, head and neck, for instance — can now be diagnosed using noninvasive MRA. MRA provides an accurate and noninvasive evaluation of intracranial aneurysms and other vascular pathology without the cost and risk of conventional angiography. MRA can also be combined with conventional brain MR and CT imaging to evaluate chronic stroke patients, acute cerebral ischemia and major vascular occlusive disease. Plus, MRA can provide additional anatomic information not evaluated with conventional angiography. In addition, with MRA, contrast agents can be entirely avoided in certain situations, eliminating the risk of allergic reaction and kidney damage.

A TRADITION OF PARTNERING WITH YOU FOR RELIABLE DIAGNOSES & OUTSTANDING PATIENT CARE.

At Valley Radiologists, neuroradiology is just one of the many focused programs we offer... with the clinical excellence that's been the cornerstone of our reputation for more than 40 years. With subspecialty training, credentials and practical experience in neuroradiology, we've helped evolve this imaging subspecialty to its current standard. At the same time, our radiologists are always available to help select an exam, confirm a diagnosis, plan treatment and evaluate treatment efficacy.

For more information on neuroradiology, Valley Radiologists, our other areas of subspecialty expertise or if you wish to refer a patient, please call 623-847-2000.



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DEER VALLEY OFFICE

Deer Valley Medical Center
2525 West Greenway Road, Suite 250
Phoenix, AZ 85023
*SERVICES: Bone Densitometry, Diagnostic Radiography,
Screening Mammography, Ultrasound*

ESTRELLA OFFICE

Estrella Medical Plaza I
9305 West Thomas Road, Suite 100
Phoenix, AZ 85037
*SERVICES: Bone Densitometry, Breast MRI, CT,
Digital Radiography, Digital Screening & Diagnostic
Mammography, Interventional Breast Services, MRI, Ultrasound*

PALM VALLEY OFFICE

Palm Valley Medical Plaza
13555 West McDowell Road, Suite 106
Goodyear, AZ 85338
*SERVICES: Bone Densitometry, CT, Digital Radiography,
Digital Screening & Diagnostic Mammography, MRI, Ultrasound*

PARADISE VALLEY OFFICE

16641 North 40th Street, Suite 1
Phoenix, AZ 85032
*SERVICES: Breast MRI, CT, MRI, Ultrasound,
Vascular Ultrasound*

PARKVALE OFFICE

Parkvale Medical Building
4616 North 51st Avenue, Suite 104
Phoenix, AZ 85031
*SERVICES: Bone Densitometry, CT, Digital Radiography,
Screening Mammography, Ultrasound*

PASEO I OFFICE

Paseo Medical Plaza I
5601 West Eugie Avenue, Suite 102
Glendale, AZ 85304
*SERVICES: Digital Radiography,
Digital Fluoroscopy, Ultrasound*

PASEO II OFFICE

Paseo Medical Plaza II
5605 West Eugie Avenue, Suite 110
Glendale, AZ 85304
*SERVICES: Breast MRI, CT, CTA, Digital Screening
Mammography, MRI, PET/CT, Ultrasound, Vein Lab*

SUNWEST OFFICE

Sunwest Medical Center
5757 West Thunderbird Road, Suite W101
Glendale, AZ 85306
SERVICES: Bone Densitometry, Digital Radiography

SUNWEST BREAST CENTER

Sunwest Medical Center
5757 West Thunderbird Road, Suite W100
Glendale, AZ 85306
*SERVICES: Breast Ultrasound, Interventional Breast Services,
Digital Screening & Diagnostic Mammography*

THUNDERBIRD OFFICE

Thunderbird Medical Plaza II
5310 West Thunderbird Road, Suite 100
Glendale, AZ 85306
SERVICES: Digital Radiography, Ultrasound

BUSINESS OFFICE

2323 West Rose Garden Lane
Phoenix, AZ 85027

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