





MRI ANATOMICAL GUIDE

Wake Forest Baptist Imaging performs creatinine labs onsite. Please include creatinine levels of all patients when available. Patients with H/O renal disease or diabetes must have current lab work within 3 months.

Area of Concern	Body Part	Reason for Exam	IV w/Contrast	Procedure to Pre-Cert	Codes	
Head  	Brain	Alzheimer's Mental Status Change Confusion Dementia Memory Loss Suspected MS	Stroke /CVA TIA Trauma Dizziness /Vertigo (CVA) Headaches	No	MRI Brain w/o Contrast	70551
		Tumor / Mass / Cancer Cranial Nerve Lesions HIV Infection Multiple Sclerosis Neurofibromatosis Hearing Loss, IAC Mass Pituitary Lesion	Acoustic Neuroma Syrinx Visual Change Vascular Lesions (AVM) Elevated Prolactin Vertigo / Dizziness (IAC) Bell's palsy	Yes	MRI Brain w/ & w/o Contrast	70553
	MRA Brain (COW)	Aneurysm, family hx Aneurysm	TIA Stroke / CVA	No	MRA Brain w/o Contrast	70544
	MRA Neck	Bruit Stroke/ CVA TIA	Abnormal doppler or dizziness	Yes	MRA Neck w/ & w/o Contrast	70549
	MRV Brain	Venous Thrombosis		No	MRV w/o Contrast	70544
	Orbits (includes whole brain - plus thin cuts thru the orbits)	Trauma		No	MRI Orbits/ Face/ Neck w/o Contrast	70540
		Graves Disease Exophthalmos / Proptosis Vascular Lesions (Hemangioma)	Tumor / Mass / Cancer / Mets Pseudotumor	Yes	MRI Orbits/ Neck w/ & w/o Contrast	70543
Neck Soft Tissue	Infection Pain	Tumor / Mass / Cancer / Mets Vocal Cord Paralysis	Yes	MRI Orbits w/ & w/o Contrast	70543	


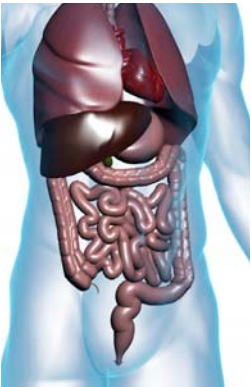
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Chest	Brachial Plexus	Brachial Plexus Injury Nerve Avulsion	Yes	MRI Chest / Mediastinum w/ & w/o Contrast	71552	
Breast 	Breast	Newly diagnosed cancer Personal History of BC BRCA 1 or 2 Gene High risk screening Implant Integrity/Rupture	Evaluate response to chemo Dense breasts Palpable lump w/abnormal US or mammographic findings	Yes	MRI Breast Bilateral w/wo contrast	77059
		Implant Integrity/rupture		No	MRI Breast Bilateral w/o Contrast	77059
Abdomen and Pelvis 	Abdomen: General	Tumor / Mass / Cancer / Mets Abdominal Pain	Yes	MRI Abdomen w/ & w/o Contrast	74183	
	Abdomen: Liver	Post embolization Hemangioma Hepatoma	Hepatitis Cirrhosis Increased LFTs			
	MRCP: Biliary	Biliary Obstruction Stones	Jaundice Abdnormal enzymes	Yes	MRI Abdomen w/o Contrast (MRCP)	74183
	MRI Renal (Kidneys)	Renal Mass (cyst or solid) Hematuria Transitional cell carcinoma of kidney	Abnormal finding	Yes	MRI Abdomen w/ & w/o Contrast	74183
	MRI Adrenal	Adrenal Mass or Lesion Pheochromocytoma	Hypertension	Yes	MRI Abdomen w/ & w/o Contrast	74183
	MRI Pancreas	Pancreatitis Pancreas Mass Cholangiocarcinoma PSC (primary sclerosing cholangitis)	Increased LFT's Painless jaundice Ampulla evaluation	Yes	MRI Abdomen w/ & w/o Contrast	74183

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Abdomen and Pelvis continued	MRA Abdomen	Renal artery stenosis Hypertension	Mesenteric Arterial Ischemia	Yes	MRA Abdomen w/ & w/o contrast	74185	
	Pelvis Soft Tissue: General	Tumor / Mass / Cancer / Mets Pain	Abscess Decubitus Ulcer	Yes	MRI Pelvis w/ & w/o Contrast	72197	
	Pelvis Soft Tissue: Uterus	Fibroid Adenomyosis	Pre/Post Fibroid Embolization Infertility				
	Pelvis Soft Tissue: Ovaries	Ovarian Mass	Endometrioma				
	Pelvis Soft Tissue:	Bicornuate Uterus	Septate Uterus	Yes	MRI Pelvis w/ & w/o Contrast	72197	
Musculoskeletal	Extremity: Non Joint	Fracture Stress Fracture	Muscle / Tendon Tear	No	MRI — Non Joint Without Contrast	73218 73718	
		Forearm Humerus	Abscess Ulcer Tumor / Mass /Mets Cellulitis Fasciitis	Myositis Morton's Neuroma Osteomyelitis	Yes		MRI — Non Joint w/ & w/o Contrast
	Lower Leg/Calf Femur/Thigh	Soft tissue Tumor/ Mass/ Mets		No	MRI — Joint Without Contrast	73221 73721	
	Hand Foot (ankle/hind foot, midfoot, forefoot)	Meniscal Tear Muscle Tear Ligament Tear Cartilage Tear Osteochondritis Dissecans (OCD)					Yes
	Extremity: Joint	Arthritis Avascular Necrosis (AVN) Stress Fracture Internal Derangement Pain Labral Tear		Inflammatory Arthritis Osteomyelitis (contrast as needed) Septic Arthritis Tumor/ Mass/ Mets			
	Upper Wrist Elbow Shoulder	Lower Ankle (Includes distal, tibia & fibula thru base of metatarsals) Knee Hip - will include whole pelvis					





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Musculoskeletal continued 	Bony Pelvis/Pelvis/Hip	Fracture Pain	Trauma Muscle/ Tendon Tear	No	MRI — Pelvis w/o Contrast	72195
		Tumor/ Mass/ Cancer/ Mets Osteomyelitis	Septic Arthritis	Yes	MRI — Pelvis w/ & w/o Contrast	72197
	Spine: Cervical	Arm/ Shoulder Pain Numbness Neck Pain	Disc Herniation Radiculopathy Degenerative Disease	No	MRI Cervical Spine w/o Contrast	72141
		Syrinx Discitis Osteomyelitis	Myelopathy Multiple Sclerosis Tumor/ Mass/ Cancer/ Mets	Yes	MRI Cervical Spine w/ & w/o Contrast	72156
	Spine: Thoracic	Back pain Degenerative disc disease Disc Herniation Radiculopathy	Trauma Compression Fracture — (no hx of malignancy)	No	MRI Thoracic Spine w/o Contrast	72146
		Discitis Post-op Fusion Syrinx Osteomyelitis Multiple Sclerosis	Myelopathy Tumor/ Mass/ Cancer/ Mets Compression Fracture — (w/ hx of malignancy)	Yes	MRI Thoracic Spine w/ & w/o Contrast	72157
	Spine: Lumbar	Back, Leg pain Degenerative Disease Disc Herniation Radiculopathy Trauma	Sciatica Spondylolisthesis Spinal Stenosis Compression Fracture — (no hx of malignancy)	No	MRI Lumbar Spine w/o Contrast	72148
		Discitis Osteomyelitis Post-Op-Hx of Lumbar Surgery	Tumor/ Mass/ Cancer / Mets Compression Fracture w/Hx of malignancy	Yes	MRI Lumbar Spine w/ & w/o Contrast	72158

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MRI SAFETY

Magnetic Resonance Imaging (MRI) is a way of obtaining very detailed images of organs and tissues throughout the body without utilizing radiation. Instead, MRI utilizes a powerful magnetic field, radio waves, a rapidly changing magnetic field, and a computer to demonstrate whether or not there is an injury or some disease process present. An MRI exam causes no pain, and the magnetic fields produce no known tissue damage or side effects. However, the powerful magnetic field of the MR system will attract iron-containing (ferromagnetic) objects or cause them to move suddenly and with great force. This includes items in the body (aneurysm clips...) or external objects. Other metallic implants or objects may distort the MRI images. For this reason, great care is taken to ensure the safety of our patients.

Some MRI exams may require the injection of a contrast material called gadolinium into a vein to help interpret the exam. Although gadolinium does not contain iodine, recent findings have shown the gadolinium-based contrast agents increase the risk for nephrogenic systemic fibrosis (NSF) in certain patients. Therefore, we have adjusted our screening guidelines to ensure the highest safety standards for patients.

WEIGHT LIMITS & CLAUSTROPHOBIA

350 lbs or less

Most claustrophobic patients have successful exams. Some patients may require a mild oral sedative prescribed by their doctor. Wake Forest Baptist Imaging does not provide sedation.

GADOLINIUM-BASED CONTRAST AGENTS AND NSF:

As your partner in healthcare, we would like to keep you up to date on aspects related to Radiology. Since June 2006, the FDA has issued two Public Health Advisories concerning gadolinium-based contrast agents (GBCA's) and a disease known as Nephrogenic Systemic Fibrosis (NSF), formerly known as Nephrogenic Fibrosing Dermopathy (NFD).

Wake Forest Baptist Imaging uses a gadolinium-based contrast material for MRI contrast injections when you order MRI "with contrast." Depending on a patient's individual history and symptoms, injection of MRI contrast may enhance the images and give the radiologists better differentiation and clarity for parts of the body.

To ensure the highest safety standards for your patients, the following factors are used to help screen patients for renal disease.

1. History of renal failure or dialysis*
2. Age
3. Sex
4. Race

* History of renal failure or disease and diabetes are screening questions at the point of MRI scheduling.

Using the creatinine value, age, sex and race, a scientific score commonly referred to as GFR is calculated and reviewed by a radiologist. This score assists the radiologists and referring physicians in making a determination to:

1. Inject MRI contrast at a normal rate
2. Reduce the amount of contrast used
3. Perform MRI without contrast

CONTRAINDICATIONS:

Cardiac Pacemakers, Defibrillators, Cochlear Implants, Cerebral Aneurysm Clips

To ensure the highest standard of safety, we would like to review any metallic objects in the body or topical treatments (such as wound treatments) prior to your MRI exam. Typically dental work does not affect an MRI.





MRI SCREENING QUESTIONS

Yes No

- Do you have a pacemaker? If yes, an MRI cannot be performed.
- Do you have a brain aneurysm clip? If yes, we must know what type of aneurysm clip it is before we can scan the patient. (does the physician and/or patient have surgical notes or a card?)
- Is there any chance that you have any metal shavings or metal in your eyes? If yes, patient needs to have orbit x-rays done to r/o metallic foreign bodies prior to MRI. Patient needs to be scheduled for orbits - 30 minutes prior to MRI.
- Do you have any stents? If yes, ask the patient to bring their stent id card to their appointment. When what the surgery?
- Do you have any metallic implant or artificial devices? If so, what kind?
- Have you had brain surgery?
- Have you had heart surgery?
- Have you had ear surgery?
- Have you had eye surgery?
- Do you weigh 350 lbs or greater? If yes, we will not be able to perform their exam. Suggest they be scheduled at the medical center or an "open" magnet in the area.
- Are you claustrophobic? If so, please talk with your physician as soon as possible to obtain oral sedation, prior to your exam date/time. Please bring a driver with you and take medication 45 minutes prior to your exam time.
- Is there any chance you could be pregnant? If so, please contact your MD because we need a blood pregnancy test before we can scan you..

FOR CONTRASTED STUDIES

Yes No

- Have you had recent labwork (BUN or CREATININE) within the last 30 days? If yes, where was that performed?
 If patient answers yes to any of the following questions, the patient will need current labwork (Creatinine) done. (within last 30 days) If labs are needed and have not been done - pt should arrive 30 minutes earlier for labwork.
- Are you diabetic?
- Do you have a history of kidney disease, kidney failure, or kidney problems?
- Have you had either kidney removed?
- Have you had a kidney transplant?
- Are you on or have you been on dialysis?

BREAST MRI SCREENING QUESTIONS

Yes No

Indicate reason for exam

- Screening due to high risk/family history (Must have mammogram within 2 months of MRI). Please obtain previous exams for radiologists review prior to MRI.
- Newly diagnosed Breast Cancer (Must have mammogram within 2 months of MRI). Please obtain previous exams for radiologists review prior to MRI.
- Implant Integrity / Rupture (Must have a mammogram within 12 months) Please obtain previous exams for radiologists review prior to MRI.
- List current symptoms
- Provide history of previous Breast procedures such as biopsies, breast reduction, lumpectomy. Please fax results.
- Is teh patient taking hormones?
- Is the patient currently pregnant or lactating?
- Indicate Family breast cancer and ovarian cancer history. Give relationship to patient, age of family member.

