UAB MEDICINE **Interdisciplinary Policy**

Title:	*MRI Contrast Media*				
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Approved:	*Matthew Larrison* 4/24/18 Matthew Larrison, M.D. Date Vice Chairman of Radiology Quality Improvement and Patient Safety	Approved:	N/A Date	Discontinued:	

PURPOSE: To establish guidelines for the use of contrast media within the MRI department

SCOPE: This policy applies to all UAB Medicine Department of Radiology MRI sections and Cardiovascular MRI at Boshell.

POLICY STATMENT: It is our belief that the proper use of contrast media is obligatory for patient safety

POLICY:

A. For Group II agents (e.g. Prohance and Dotarem) assessment of renal function with a questionnaire or laboratory testing is optional and not required prior to intravenous administration for both outpatients and inpatients.
B. For Group I and III agents (e.g., Eovist) it is important to identify patients at risk of developing NSF, prior to injection of group I and III GBCAs. The method used to identify such patients is different for outpatients versus inpatients. This data is summarized in the ACR manual on page 90.

1. Outpatients/ED with no prior eGFR at the time of MR exam, utilize panel of questions that includes risk factors for compromised renal function. Questions to include:
    a. History of renal disease, including:
    b. Dialysis
    c. Kidney transplant
    d. Single kidney
    e. History of known cancer involving the kidney(s)
    f. History of hypertension requiring medical therapy
    g. History of diabetes mellitus
        i. If NO risk factors, no eGFR required.
        ii. WITH risk factors, obtain eGFR.
2. Outpatient/ED with most recent prior eGFR of 45 or above, utilize panel of questions above.
    a. a. If NO risk factor and eGFR of 60 or above, no new eGFR required.
    b. b. WITH risk factors and/or eGFR 45-59, if most recent prior eGFR is within 6 weeks of the MRI, no new eGFR is needed; otherwise obtain a new eGFR.
3. Outpatient/ED with most recent prior eGFR of 44 or below, obtain eGFR within 2 days of the MRI study
4. Inpatients: Obtain eGFR within 2 days of the MRI study.
5. For Group I and III agents the radiologist is to be notified for GFR less than 60. The decision to administer Group I and III contrast in patients with GFR

less than 60 is at the radiologist's discretion. With Group I and III agents, contrast is not routinely administered for GFR below 30; however, the decision to administer contrast is at the discretion of the radiologist.

C. Informed Consent

1. Consent will not be required for non-contrast MRI in the pregnant patient, however, a radiologist or radiology resident must discuss the case with the referring doctor to confirm the appropriateness of the exam and the lack of viable alternatives. The following documentation is to be entered into the MR report:

"*To date no delayed sequela from routine MR examinations performed during any trimester of pregnancy has been documented, and it is expected that the potential risk for any delayed sequela is extremely small or non-existent. However, according to the FDA, the safety of MR procedures during pregnancy has not been definitively proven, and should only be performed when medically necessary. Dr, [ ] discussed the theoretical risks and available alternatives with the patient's ordering clinician, Dr. [ ], and both agreed to proceed with the MR exam. Gadolinium (MRI contrast agent) should not typically be administered to pregnant patients, as studies suggest it can adversely affect the fetus.*"

2. Gadolinium (MRI contrast agent) is generally not given in cases involving pregnancy.
    a. On a special case-by-case basis, an attending Radiologist may prescribe gadolinium based contrast agents. This should be accompanied with a well-documented risk-benefit analysis that defends the decision to administer contrast. This decision should only be made if there is an overwhelming potential benefit to the patient or fetus outweighing the risk of long-term exposure of the fetus to free gadolinium ions. The patient will be counseled and written informed consent
    b. The consent form from the patient or her/his representative will be digitized as a component of the MRI examination and become part of the patient record via PACS. The paper informed consent document will be placed in the patient's clinic or hospital chart.

D. Guidelines for Oral Contrast Administration

1. The technologist will review the indication entered by the ordering physician and administer oral contrast per radiologist protocol.
2. The technologist will prepare the oral contrast per protocol.
3. Oral contrast is given in the MRI department prior to the exam.

...REFERENCES:

Tublin et al Current Concepts in Contrast Media Induced Nephropathy. American Journal of Roentgenology (AJR) 1998; 171:933.

European Society of Urogenital Radiology (ESUR) guidelines on contrast media: www.esur.org

Thomsen HS. Guidelines for Contrast Media American Journal of Roentgenology (AJR) 2003;181:1463

Manual on Contrast Media form the American College of Radiology, Version 10.3, 2017

MRI Contrast Dosing Protocol, 2018.

CMS:	**None**	**TJCH:**	**None**
NFPA Ref #	**None**		

Cross-References (CR):None

ATTACHMENTS: None

INTERDISCIPLINARY COLLABORATION

None	
Physician / Medical Committees	**Endorsement Date**
None	
Committees / Councils	Endorsement Date
None	
Department(s)	Endorsement Date

Tracking Record

Supersedes:	MRI Contrast Media 10/04/07, 09/06/10, 04/07/14, 12/17/14
File Name:	MRI Contrast Media R#21r4
REVISIONS: Consistent with Joint Commission Standards, this policy is to be reviewed at least every 3 years and/or as practice changes.	