

MDR Gadolinium Contrast Screening Protocol

1) Screening for eGFR will be done for patients with any of the following risk factors:

- Age greater than 60
- History of renal disease, including
 - Dialysis
 - Kidney transplant
 - Single kidney
 - Kidney surgery
 - History of known cancer involving the kidney(s)
 - History of acute renal failure
- History of diabetes mellitus
- History of vascular disease
- History of hypertension requiring medication
- Recent vascular surgery, arteriovenous graft or revision and acute venous thrombosis

eGFR greater than 60

- Lab data is valid for **60 days for outpatients and for 14 days for inpatients with stable medical status**, i.e., no known condition that might result in acute deterioration of renal function.
- Lab data is valid for **3 days if unstable medical status**, i.e., patient has a known condition that might result in acute deterioration of renal function, such as severe dehydration, febrile illness, sepsis, heart failure, recent hospitalization, advanced liver disease and abdominal surgery.

eGFR 41-59

- Lab data is valid for **14 days**.

eGFR 30 to 40

- Lab data is valid for **1 day**.

***If lab information is not available and the patient is greater than age 60 with no other risk factor(s) as above, default to the CKD 3b protocol, 1/2 dose for MRI and 1/2 dose up to full dose for MRA.**

2) Regarding our current Gadolinium agents: Multihance, Prohance, Ablavar and Omniscan

- Multihance is the primary contrast agent for MRI and MRA exams.
- Patients with a history of asthma will receive Prohance.
- Patients with multiple allergies will receive Prohance.
- Patients with a history of anaphylaxis to anything will be presented to the radiologist for review.
- Ablavar has had restricted use due to cost at the hospital sites for renal, IVC and RA masses and thrombus, venous malformations and in selected MRA cases on the open magnets.
- Omniscan will still be available for pediatric patients less than 2 years of age (FDA approved).
- Of the nine gadolinium agents, Multihance and Prohance have the best safety profile at the present time. Gadovist and Dotarem (not yet FDA approved) may show promise.

Group I: Agents associated with the greatest number of NSF cases:

Omniscan, Magnets, OptiMARK

Group II: Agents associated with few, if any, unconfounded cases of NSF:

MultiHance, ProHance, Dotarem, Gadovist

Group III: Agents which have only recently appeared on the US market:

Ablavar, Eovist