Memorandum

To: Dept of Radiology Staff, Residents, Nurses and CT Technologists

From: Dr. Julia Fielding

Date: 9/18/2013 (revised)

Re: IV contrast administration guidelines for CT/CIN

The majority of outpatients are at very low risk for CIN (contrast induced nephropathy), while inpatients have a significant risk of renal damage. All patients benefit from good hydration prior to and following the examination.

1. For outpatients, the following are considered significant risk factors:

- History of kidney disease (patients with 1 kidney can still receive full dose)
- Chemotherapeutic regimens
- Chronic use of certain medications including NSAIDs, aminoglycosides
- Active congestive heart failure
- Insulin dependent diabetes mellitus
- Collagen vascular disease or multiple myeloma

If a patient falls into one of the above groups, a Cr level must be available within the last 3 months or drawn prior to the exam – Istat Cr is acceptable. Please note that patient age greater than 65 years alone is not an indication for Cr.

2. All inpatients require a Cr level prior to contrast injection

3. All ER patients with the exception of urgent cases such as trauma require a Cr level prior to contrast injection.

Our acceptable Cr for administration of IV contrast is less than or equal to 1.5 mg/dl. If the Cr level is above this, then consider a non-contrast or alternative test. Remember, these are guidelines. If a patient history leads you to believe he/she might be at risk for CIN then order a Cr.

Reference: ACR Manual on Contrast Usage, accessed online 6/4/2010