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Guidelines for the IV administration of Iodinated Contrast for CT Imaging

RPC Approval: 2/17/2020

Next Review: 2/2022

Division/Champion: CT/Thoburn

Subject: Guidelines for CT imaging with Iodinated IV contrast

Purpose: Provide guidelines for the administration of Iodinated IV contrast for CT imaging.

Policy:

There is very little evidence that IV iodinated contrast material is an independent risk factor for AKI in patients with eGFR ≥ 30 mL / min/1.73m².

Therefore, there is no strict contraindication to the IV administration of iodinated contrast even in a patient with impaired renal function with a eGFR ≥ 30 mL/min.

Given the theoretical risk of CIN in patients with a eGFR < 30 mL / min, these patients should not routinely receive IV contrast, unless they are on **CHRONIC DIALYSIS***. In patients that are not on CHRONIC DIALYSIS the decision to administer contrast should be made only after consultation with a radiologist. Visipaque 320 is the contrast agent of choice in these circumstances.

Visipaque 320 is also recommended for use in those patients with a eGFR ≥ 30 and < 60 mL / min, as well as patients with a single functioning kidney.

Anuric patients with end-stage renal disease who do not have a functioning kidney are not at risk for CIN because their kidneys are nonfunctional; these patients may receive intravascular iodinated contrast material without risk of additional renal injury. Unless an unusually large volume of contrast medium is administered, or there is substantial underlying cardiac dysfunction, there is no need for dialysis after intravascular iodinated contrast medium administration

Attachments: <https://pubs.rsna.org/doi/10.1148/radiol.2019192094>

* There is also theoretical risk of converting an oliguric patient on dialysis to an anuric patient on dialysis by exposing him or her to intravascular iodinated contrast medium. This remains speculative, as there are no conclusive outcomes data in this setting.