

Contrast Induced Nephropathy (CIN) Prophylaxis

Assess Risk

High volume (100mls) or intra-arterial iodinated contrast procedure
and
CKD with eGFR<60 (particularly diabetic nephropathy)
or AKI

Other risk factors >75, dehydration, heart failure, severe sepsis, cirrhosis, nephrotoxins (NSAIDS, aminoglycosides). High volume or arterial contrast
Risk factors are multiplicative.

Is Contrast Procedure Necessary?

Yes

Resuscitate to euvolaemia

Give Prophylaxis if High Risk

Volume expansion (unless hypervolaemic) with normal saline or or 1.26% bicarbonate
Sample regimens
IV Na bicarbonate 1.26% 3mls/Kg/hr for 1 hour pre-procedure and 6 hours post-procedure
or
IV 0.9% normal saline 1ml/kg/hr 12 hours pre and 12 hours post procedure

Minimise contrast, use low or iso-osmolar contrast

Monitor Function To 72 Hours in High Risk Cases

If oliguria or rising creatinine early referral to local renal team.
NB there is no-proven role for N-Acetyl cysteine or post-contrast dialysis/CVVH.
Cessation of metformin should be considered if serum Cr above reference range or eGFR<60.
Cessation of ACE inhibitors should be considered if acutely ill.