



COHESIVE HEALTHCARE MANAGEMENT & CONSULTING

Mangum Regional Medical Center

TITLE		POLICY
Contrast-Induced Nephropathy Prevention		DRM-057
MANUAL	EFFECTIVE DATE	REVIEW DATE
Drug Room	10-1-2020	10-1-2020
DEPARTMENT	REFERENCE	
Drug Room	https://www.acr.org	

SCOPE

This policy applies to all patients receiving care and treatment at MANGUM REGIONAL MEDICAL CENTER.

PURPOSE

This purpose of this protocol is to limit the risk of contrast induced nephropathy (CIN) for adult patients after the administration of contrast media.

DEFINITIONS

Contrast induced nephropathy (CIN): a serious complication following angiographic procedures resulting from the administration of contrast media. CIN is defined as an elevation of serum creatinine (SCr) of more than 25% or ≥ 0.5 mg/dL from baseline within 48 hours after contrast media administration.

PROCEDURE

GFR	Recommendation
> 60 mL/min	<input type="checkbox"/> Hold metformin until 48 hours post-procedure
30-60 mL/min	<input type="checkbox"/> Hydrate the night before the procedure <ul style="list-style-type: none">○ At least 4-6 glasses of water up to 4 hours pre-procedure <input type="checkbox"/> Hold ACE inhibitors, angiotensin receptor blockers, diuretics, NSAIDs, and COX-2 inhibitors 24 hours before the procedure <ul style="list-style-type: none">○ Aforementioned medications may be resumed 24 hours after the procedure <input type="checkbox"/> Hold metformin until 48 hours post-procedure or until creatinine is stable

<p>< 30 mL/min</p>	<ul style="list-style-type: none"> <input type="checkbox"/> For in-patient administration: <ul style="list-style-type: none"> <input type="checkbox"/> 0.9% Normal saline at 100 mL/hr beginning 6-12 hours prior to administration of IV contrast and continuing for 4-12 hours afterwards <input type="checkbox"/> 50 mEq NaHCO₃ in 1 Liter NaCl 0.45% 1mL/kg for 12 hours before/after IV contrast administration <input type="checkbox"/> For out-patient administration: <ul style="list-style-type: none"> <input type="checkbox"/> 0.9% Normal saline 500mL IV bolus prior to IV contrast <input type="checkbox"/> 50 mEq NaHCO₃ in 1 Liter NaCl 0.45% 3mL/kg for 1 hour before IV contrast then reduce rate to 1mL/kg for 6 hours <input type="checkbox"/> Acetylcysteine (Mucomyst®) 600 mg orally every 12 hours the day before and the day of the procedure (total of 4 doses) <input type="checkbox"/> Hold ACE inhibitors, angiotensin receptor blockers, diuretics, NSAIDs, and COX-2 inhibitors 24 hours before the procedure <ul style="list-style-type: none"> <input type="checkbox"/> Aforementioned medications may be resumed 24 hours after the procedure <input type="checkbox"/> Hold metformin until 48 hours post-procedure or until creatinine is stable
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REFERENCES

<https://www.acr.org>

ACR Manual on Contrast Media Version 10.3, 2017: 6-15, 24-30

ATTACHMENTS

None.

REVISIONS/UPDATES

Date	Brief Description of Revision/Change