

Contrast Induced Nephropathy

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Background

- Contrast-induced nephropathy (CIN) is a common cause of acute kidney injury (AKI).
- CIN can result from a Cardiac Coronary Angiogram.
- Research indicates that hydration prior to a procedure with contrast can help protect the kidneys from developing CIN.
- Pre-procedure oral hydration has proven to be as effective in preventing CIN as IV hydration.

Purpose

- To determine the effectiveness of
 - Pre-procedure oral hydration on development of CIN
 - Address inconsistencies between office instructions and hospital instructions

Methods

- Evidence Based Practice
- CVSSU nurses inform patients to drink 16oz water prior to procedure.
- Measure/analyze pre-procedure/post-procedure oral fluid intake and pre-procedure/post-procedure creatinine.

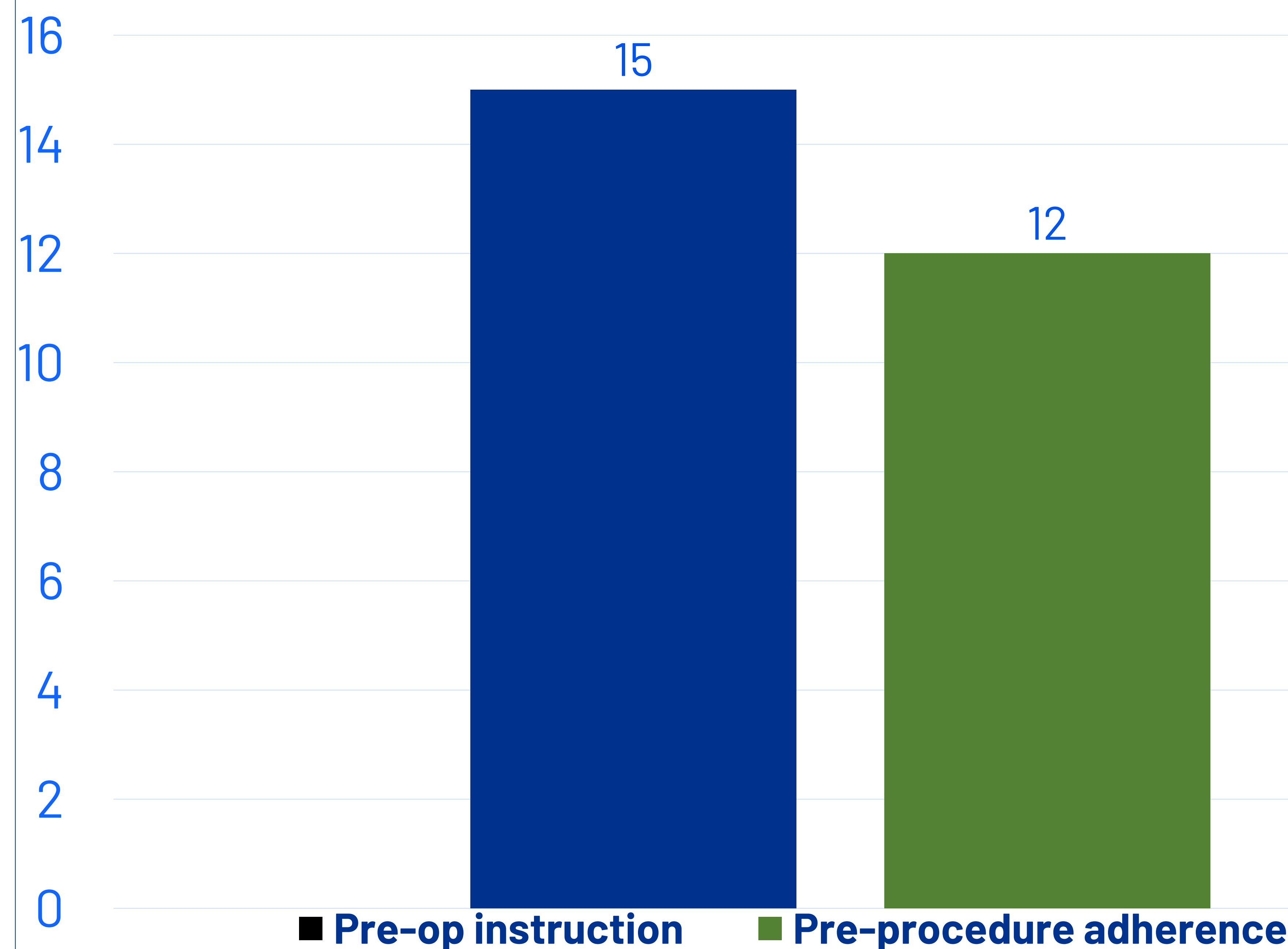
Results

- 75% of patients were instructed by CV RN to drink water prior to procedure and were compliant.
- 25% were not instructed by pre op RN to drink water.
- 6% of patients were admitted after procedure and had a creatinine recorded.

Discussion

- Patients on dialysis were limited in their oral fluid intake.
- Patients did not follow CVSSU instructions for oral intake because their doctor's office instructed them to remain NPO after midnight.

Water Intake for Angiogram



Implications for Practice

- Consistent instructions regarding water intake pre-procedure are necessary.
- Continue data collection for a larger sample with pre/post creatinine to determine associations.

Acknowledgments

Thank you to the CVSSU nurses and cardiologists that take great care of our patients.

References available upon request.