

Contrast-Induced Nephropathy Is Often Overlooked



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Avoiding contrast-induced nephropathy (CIN) is crucial in achieving good clinical outcomes. The only sure method to avoid this dreaded complication is not to administer contrast. Contrast-induced nephropathy is associated with much higher immediate and long-term mortality as well as substantially increased costs. It must be factored in to the risk-benefit ratio of any procedure.

In this issue of Vascular Disease Management, Dr. Weinstock addresses who is most at risk and reviews the various trials that were performed on therapies aimed at lessening that risk. It is mandatory that all clinicians be cognizant of this frequently overlooked risk.

Far more attention is concentrated on complications such as embolization, perforation, restenosis, pseudoaneurysm, and other more immediately recognized complications than CIN. Every patient undergoing angiographic studies or intervention should have a clear assessment of their risk of developing CIN prior to the procedure. Advancements in CO₂ angiography and external ultrasound guidance allow the diagnosis and treatment of many patients without the need

for any contrast usage. Practitioners must familiarize themselves with these techniques and how to best utilize them. In some cases these technologies can be used in conjunction with contrast only in tiny amounts at key procedure steps to greatly lessen the total amount of contrast utilized. Imaging with CO₂ may be difficult in patients who can't remain stationary or where there is a large amount of overlying gas.

When contrast must be utilized, effort should be made to limit the amount of contrast administered by taking very selected images with catheters placed as close to the area to be imaged as possible. Pre-procedure hydration is not only important in preventing CIN but it is helpful in preventing hypotension with the administration of vasodilators and in maximizing cardiac output and flow.

We should treat all patients as at risk and adopt practices that limit this risk as a means by which to improve all diagnostic and interventional outcomes.