

## LETTER TO THE EDITOR

## In Reply to ‘Contrast-Enhanced CT in Patients With Kidney Disease: Some Considerations in Response to the ACR/NKF Consensus’



We thank Ronco and Nyman<sup>1</sup> for their commentary on the ACR/NKF consensus statements<sup>2</sup> on the use of intravenous iodinated contrast media in patients with kidney disease. We agree that safety is a major consideration. We stated: “in individual high-risk circumstances (eg, numerous risk factors, recent AKI, borderline eGFR), prophylaxis may be considered in patients with eGFRs of 30 to 44 mL/min/1.73 m<sup>2</sup> at the discretion of the ordering clinician,”<sup>2</sup> despite lacking evidence that prophylaxis in this population is beneficial.

Nephrologists have long been concerned with causing AKI (including small serum creatinine increases) in patients with chronic kidney disease. This led to recommendations to avoid otherwise necessary and potentially life-saving medications and investigations, including contrast-enhanced imaging. It is important to recognize that avoiding contrast media purely to avoid “hypercreatininemia” is “renalism” and can result in more harm than good in many patients. There are instances in which hypercreatininemia is associated with better outcomes.<sup>3,4</sup>

Ronco and Nyman repeatedly cite data from studies using intra-arterial contrast media used in angiography. These have limited relevance to the consensus statements, which focus on intravenous media. They also cite a single-center observational study in which intra-arterial contrast media increased biomarker levels (not serum creatinine) in 13 patients and claim that this indicates structural kidney damage.<sup>5</sup> This small series is unconfirmed and has no direct relevance to intravenous media. A recent substudy of the PRESERVE randomized trial showed no difference in biomarker levels in patients with versus without contrast-associated AKI.<sup>6</sup>

The authors claim that the numerous large retrospective propensity-adjusted cohort studies supporting recommendations in the consensus statements<sup>2</sup> are tantamount to “low-grade evidence.” The evidence for their opinion is a guideline comparison written by one of the authors, which stood in contradistinction to the opinions of the European Society of Urogenital Radiology. Ironically, evidence supporting their opinion that intravenous media are nephrotoxic, especially when eGFR is 30 to 44 mL/min per 1.73 m<sup>2</sup>, is sorely lacking. Certainly we would not

consider small biomarker studies with no outcomes data to be greater evidence than numerous propensity-adjusted studies with tens of thousands of patients all reaching similar conclusions.

As physicians, we are constantly weighing risks and benefits. We believe our consensus statements are contemporary, evidence based, and balanced.

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## ARTICLE INFORMATION

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**Financial Disclosure:** Dr Weinreb has received a consulting fee or honorarium from Bayer Healthcare and Bracco Diagnostics. Drs Perazella and Davenport declare that they have no relevant financial interests.

**Peer Review:** Received May 4, 2020. Accepted May 5, 2020, after editorial review by the Editor-in-Chief.

**Publication Information:** © 2020 The Authors. Published by Elsevier Inc. on behalf of the National Kidney Foundation, Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Published online June 30, 2020 with doi 10.1016/j.xkme.2020.06.002

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