

## Heart Failure and the Renoprotective Effect of Statins



To the Editor:

We read with great interest the meta-analysis by Gandhi et al,<sup>1</sup> highlighting the protective role of statins in contrast-induced nephropathy. We would like to comment on the potential benefit of but lack of evidence on the role of statins in cardiogenic shock and nonischemic congestive heart failure.

In the report by Gandhi et al,<sup>1</sup> cardiogenic shock was excluded in 2 of the 3 evaluated studies, with the third not commenting on the same. This is a crucial gap in literature because cardiogenic shock is an independent predictor of contrast-induced nephropathy.<sup>2</sup> Early statin initiation has been shown to reduce adverse cardiovascular outcomes and mortality in patients in cardiogenic shock undergoing emergency revascularization.<sup>3,4</sup> The anti-inflammatory action of statins are beneficial in managing the multiorgan dysfunction from cardiogenic shock.<sup>5,6</sup> We hypothesize that statins also may provide renoprotective effects in this population. However, most trials evaluating contrast-induced nephropathy have excluded patients in cardiogenic shock; therefore, the data on this aspect is lacking. With current research focusing on the role of statins in other forms of shock, there is likewise the necessity for similar research on statins in contrast-induced nephropathy and cardiogenic shock.

The report by Gandhi et al<sup>1</sup> advocates for a short course of statin therapy in all patients with congestive heart failure for protection against contrast-induced nephropathy.<sup>1</sup> Although 3 studies in the meta-analysis evaluated patients

with congestive heart failure, there was no comment on the cause.<sup>1</sup> The use of a short course of statins in preventing contrast-induced nephropathy in all patients with congestive heart failure is appealing, but should be based on additional analysis including patients with nonischemic congestive heart failure with and without hyperlipidemia. This missing information is crucial because in nonischemic congestive heart failure, the benefit of statin use is not established conclusively.<sup>7</sup>

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