

## CORRESPONDENCE

### Re. “Contrast Induced Nephropathy and Long-term Renal Decline After Percutaneous Transluminal Angioplasty for Symptomatic Peripheral Arterial Disease”

We read with interest the paper by Sigterman et al. about the incidence and consequences of contrast induced nephropathy (CIN) in symptomatic peripheral arterial disease (PAD) patients who were treated by endovascular procedures.<sup>1</sup>

To limit the recurrence of CIN, the authors suggest increasing research into potential alternatives that would remove the need for contrast administration. We would like to underscore that remote ischemic preconditioning (RIPC), performed by cycles of alternating 5 minute inflation and 5 minute deflation of a standard upper arm blood pressure cuff before the injection of contrast is an interesting prophylactic method.<sup>2</sup> Indeed, studies have shown that RIPC prevents CIN in patients at high or moderate CIN risk based on Mehran score (12 vs. 40%,  $p = .002$ , and 10 vs. 36%,  $p = .003$ , respectively).<sup>3,4</sup>

In our opinion, future research should also focus on RIPC for the prevention of acute kidney injury and improved PAD patient outcomes as RIPC is a non-invasive, cheap, easy, and safe method.

## REFERENCES

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### Response to Commentary on ‘Remote Ischemic Preconditioning to Reduce Contrast Induced Nephropathy: A Randomized Controlled Trial’

We would like to thank colleagues for addressing this very interesting issue. We have read the articles cited by Koch et al.,<sup>1</sup> namely Er et al.<sup>2</sup> and Yamanaka et al. with great interest.<sup>3</sup>

However, we think that further research in the field of remote ischemic pre-conditioning is needed, mainly because the studies described are small and single center. In contrast, two large randomized sham controlled trials in patients undergoing cardiac surgery did not show any benefit for remote ischemic preconditioning.<sup>4,5</sup>

In the light of this and as stated in the conclusion by Er et al.,<sup>1</sup> we suggest that further research should be performed. As stated in the literature we do expect several large randomized controlled trials to be published in this field comparing the possible risks of remote ischemic preconditioning with the possible advantages, and then comparing them with other interventions to prevent acute renal failure post-operatively.

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