Re. ‘Remote Ischemic Preconditioning to Reduce Contrast-Induced Nephropathy: a Randomized Controlled Trial’

We read with great interest the paper by Menting et al. about the use of remote ischemic preconditioning (RIPC) to reduce contrast medium induced nephropathy (CIN) in patients at risk of CIN. Their results in a group at high risk of CIN are in line with results from Er et al. who showed that use of such a procedure could reduce CIN in high risk patients. Er et al. identified CIN in 20 patients in their control group, but only six in their RIPC group ($p = .002$). In both studies, RIPC was performed as an adjunct to hydration. However, in our opinion, the role of hydration requires further discussion, especially where different hydration protocols are performed. Zarbock et al. showed that RIPC alone reduced the rate of acute kidney injury and the use of renal replacement therapy among high risk patients undergoing cardiac surgery. Therefore, the question remains whether or not RIPC should be used as an adjunct or alone?

REFERENCES


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Response to "Re: Remote Ischemic Preconditioning to Reduce Contrast-induced Nephropathy: A Randomized Controlled Trial"

We thank Drs. Koch and colleagues for their comments. Their question, if remote ischemic preconditioning is sufficient on its own to prevent contrast medium induced nephropathy (CIN), cannot be answered with current literature data. In patients undergoing major (non-)cardiac surgery the efficacy of remote ischemic preconditioning (RIPC) remains unclear. Some randomized controlled trials showed a reduction in surgery related acute kidney injury (AKI), whereas others could not confirm this. Regarding the use of remote ischemic preconditioning in patients receiving intravascular contrast media, we feel that there is now suggestive evidence that remote ischemic preconditioning when added to hydration may prevent CIN. However, the routine use of added RIPC in unselected patients cannot be advocated, and better identification of high risk patients is needed. Since hydration is proven to be effective in preventing CIN, and dehydation is associated with higher risk of AKI we would argue against the use of ischemic preconditioning alone in such high risk patients. However, we envisage that RIPC alone may be sufficient to prevent CIN in intermediate risk patients, and could be used to replace intravenous sodium chloride or intravenous sodium bicarbonate. Controlled studies are needed to explore the best strategies for the prevention of CIN.

REFERENCES


Re: ‘Endovascular Treatment of Ruptured Abdominal Aortic Aneurysms with Hostile Aortic Neck Anatomy’

We read with great interest the article by Broos and colleagues. The authors reported encouraging outcomes of EVAR in ruptured AAA with hostile aortic neck anatomy (HNA). We congratulate them for such a wonderful result, which may broaden the selection criteria of the current endovascular strategy to include patients previously excluded from EVAR.

As the authors advocated, it is technically feasible and safe to perform EVAR in rupture AAA with HNA at experienced endovascular centres. However, their results may not be generalisable to less experienced centres, and they did not tell inexperienced surgeons what to do under these circumstances. Previously, Brownrigg and colleagues reported that endovascular aneurysm sealing (EVAS) is effective for AAA with challenging aortic anatomy, which seems suitable for treating a greater proportion of patients than EVAR. As stent length is the only sizing variation, EVAS is of benefit in the emergency setting for ruptured aneurysm repair. Ruptured AAA with HNA can be repaired by experienced or inexperienced surgeons with the revolutionary EVAS.

REFERENCES

