Response to Letter to the Editor: ‘Re: Endograft Limb Occlusion in EVAR: Iliac Tortuosity Quantified by Three Different Indices on the Basis of Pre-operative CTA’

We thank the group for their insightful comments and the opportunity to clarify a number of points from our work on endograft limb occlusion.

In our series to determine a cut-off value of common iliac artery tortuosity index (CAI) for high-risk patients, we constructed a receiver operating characteristic (ROC) curve. The area under curve was 0.72 (95% CI 0.55—0.88) with a best cut-off value of 1.26. With CAI ≥ 1.26, the positive predictive value was 67% and the negative predictive value was 65%. The sensitivity and specificity were 59% and 85%, respectively. The relative risk for limb occlusion was 2.8.

Our article is a cohort study, so we do acknowledge the limitation of the chosen control group. Four patients in the control group had double iliac sign (DIS), and two of these had primary adjunctive stenting performed. In our series we simply state the observation that two other patients with DIS had their z-stent part of the graft limbs placed directly within the most tortuous part of the vessel, therefore having the part of the graft limb with the most radial force where it was needed.

During the extended decade period 2000—2010, we used only the Zenith flex (Cook Inc, Bloomington, IN, USA) limbs. The incidence of limb occlusions was equally distributed in the time period.

We hope that other centres will review and publish their survival results to provide further information, and we hope this will provide a more robust answer to some of the questions that have been raised.

M. Taudorf, T.V. Schroeder, L. Lönn, On behalf of the co-authors

Available online 18 September 2014

© 2014 European Society for Vascular Surgery. Published by Elsevier Ltd. All rights reserved.

REFERENCES

Response to ‘Re. Benefits of Remote Ischemic Preconditioning in Vascular Surgery’

The authors make a good point: discrepancy between animal and clinical data is multifactorial, and the factors they cite are likely to be an influence.

The most recent, properly powered randomised controlled trial (RCT) of remote ischaemic preconditioning (RIPC) in cardiac surgery avoided the use of volatile anaesthetic agents to avoid pharmacological preconditioning. This trial showed no difference between the RIPC and no RIPC groups. Conversely, the large RIPCON (Remote Ischemic Pre-Conditioning) trial of RIPC in cardiac surgery is currently recruiting using volatile agents to avoid remifentanyl, which is also associated with pharmacological preconditioning.

This highlights one of the problems with medications and RIPC: it might be impossible to avoid those that effect RIPC completely, but trials can adjust for the least powerful. Additionally, patients might fare worse with the preconditioning effect of RIPC than they would have done with the preconditioning effect of the medication being withheld. Another problem is that the mechanisms of interference are still poorly understood, and it is likely that additional, commonly prescribed medicines have an effect on RIPC. Other factors such as diabetes are common in vascular patients should be corrected for if trials are properly powered.

Protocols for other trials currently or about to recruit are heterogeneous in their approach to correcting for these factors. To date, 102 trials of remote ischaemic preconditioning are registered on ClinicalTrials.gov. It is imperative that trialists recognise and attempt to correct for these factors as early as possible. Without this, we risk publishing large, flawed trials that essentially destroy all interest in RIPC without a rigorous method.

REFERENCES


Thrombolysis in Carotid-Related Stroke Patients: What About Plaque Hemorrhage and Disruption?

The routine practice of thrombolysis in ischemic stroke patients is derived from well-conducted, randomized controlled trials (RCTs), which are the foundation of evidence-based medicine (EBM). Those studies have proved themselves extremely useful for stroke patients, helping so many people to have better outcomes after their strokes. Currently, intravenous thrombolytic therapy is recommended within 4.5 hours of the onset of symptoms in patients with acute ischemic stroke, once intracranial bleeding has been excluded by computed tomography. The exact identification of the site of occlusion causing the ischemia or, more in general, of the exact cause of stroke, is not considered mandatory before starting fibrinolytic therapy, as none of the RCTs studying the effect of rt-PA in ischemic stroke patients was designed to address the differential effects on different types or causes of ischemic strokes by using vascular imaging. Hence, a carotid axis scan is not routinely performed until the rt-PA administration has been completed. Unfortunately, it is likely that not all the patients receiving intravenous systemic rt-PA will gain the greatest efficacy and benefit from fibrinolytic therapy, and this is probably related to the lack of a careful diagnosis of the