

# European Journal of Vascular & Endovascular Surgery

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## CAROTID DISEASE

- 163 **Editor's Choice – Predictors of New Ischaemic Brain Lesions on Diffusion Weighted Imaging After Carotid Stenting and Endarterectomy: A Systematic Review**  
*M.L. Rots, A.J.A. Meershoek, L.H. Bonati, H.M. den Ruijter and G.J. de Borst*

This meta-analysis, encompassing 46 studies and 5018 patients, shows that symptomatic status, impaired cerebrovascular haemodynamics, and increased inflammatory markers are associated with increased susceptibility to peri-operative DWI lesions in CEA patients, while higher age, plaque vulnerability, and complex aortic arch / carotid anatomy are risk factors in CAS patients.

## AORTIC DISEASE

- 175 **Editor's Choice – Five Year Outcomes of the Endurant Stent Graft for Endovascular Abdominal Aortic Aneurysm Repair in the ENGAGE Registry**  
*J.A.W. Teijink, A.H. Power, D. Böckler, P. Peeters, S. van Sterkenburg, L.H. Bouwman, H.J. Verhagen, M. Bosiers, V. Rimbau, J.-P. Becquemin, P. Cuyppers and M. van Sambeek*

This large multicentre study, which includes 1263 patients with a wide range of anatomies, reports sustained safety, effectiveness, and durability at a five year follow up of EVAR with the Endurant stent graft. Longer follow up is needed.

- 182 **Systematic Long-term Follow Up After Endovascular Abdominal Aortic Aneurysm Repair With the Zenith Stent Graft**  
*S. Väärämäki, J.-P. Salenius, G. Pimenoff, I. Uurto and V. Suominen*

In this study (n = 282), freedom from any stent graft related complication and freedom from graft related re-intervention are 54% and 70%, respectively, at 10 years. As graft related complications keep appearing years after the initial procedure, lifelong surveillance after EVAR is likely needed.

### Invited commentary

- 189 **Endovascular Aneurysm Repair (EVAR) or Endovascular Aneurysm Control (EVAC)?**  
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- 190 **Effect of Low Skeletal Muscle Mass on Post-operative Survival of Patients With Abdominal Aortic Aneurysm: A Prognostic Factor Review and Meta-Analysis of Time-to-Event Data**  
*G.A. Antoniou, D. Rojoo, S.A. Antoniou, A. Alfahad, F. Torella and M.T. Juszcak*

This meta-analysis, encompassing seven studies and 1440 patients, reports that low skeletal (psoas) muscle mass is associated with mortality during follow up in patients undergoing AAA repair. Prospective studies are needed.

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*R. Castro-Ferreira, M. Lachat, P.A. Schneider, A. Freitas, A. Leite-Moreira and S.M. Sampaio*

This systematic review (23 studies) shows that the rate of AAA treatment is highly variable, with a nearly eightfold variance between the countries with the highest and the lowest rates of elective repair. Deeper understanding of the reasons for such disparities is needed.

### PERIPHERAL ARTERIAL DISEASE

206 **Effectiveness and Safety of Ultrasound Guided Lower Extremity Nerve Blockade in Infragenicular Bypass Grafting for High Risk Patients With Chronic Limb Threatening Ischaemia**

*S. Kikuchi, T. Yamaguchi, K. Miyake, D. Uchida, A. Koya, T. Iida, A. Kurosawa, T. Sasakawa, T. Kunisawa and N. Azuma*

In this study (204 limbs, including 56 propensity matched pairs), ultrasound guided nerve blockade, as compared to general anaesthesia, is associated with better haemodynamic stability, earlier resumption of clear liquid and solid food diet after surgery, and lower incidence of post-operative delirium. Prospective studies are needed.

#### Invited commentary

214 **Is Regional Anaesthesia During Bypass Surgery in High Risk Patients With Chronic Limb Threatening Ischaemia the Columbus Egg?**

*C.G. Vos and J.-P.P.M. de Vries*

215 **Impact of Plaque Calcification and Stent Oversizing on Clinical Outcomes of Atherosclerotic Femoropopliteal Arterial Occlusive Disease Following Stent Angioplasty**

*H.-p. He, J.-c. Weng, Y. Zhao, S.-h. Cai, X.-l. Zhang and H.-h. Yin*

This study (n = 15) shows that calcified plaque in the FP artery can be quantitatively analysed on pre-operative CTA images. High calcified plaque burden and excessive stent oversizing are associated with adverse clinical outcomes after stent angioplasty.

#### Invited commentary

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*A. Lejay, M. Ohana and N. Chakfe*

224 **Comparison of Immediate and Long-term Outcomes in Men and Women Undergoing Revascularisation for Chronic Limb Threatening Ischaemia in the Bypass vs. Angioplasty in Severe Ischaemia of the Leg (BASIL-1) Trial**

*R.A. Benson, L.A. Meecham, C.A. Hewitt and A.W. Bradbury*

In this secondary analysis from the BASIL trial (n = 452 including 183 women), women have similar short term but better long term outcomes, including amputation-free survival, overall survival, and freedom from major adverse limb events. Of note, several baseline characteristics are significantly different between men and women in the BASIL trial.

#### Invited commentary

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*W.S.J. Malskat, L.K. Engels, L.M. Hollestein, T. Nijsten and R.R. van den Bos*

This meta-analysis, encompassing 28 RCTs and 2829 GSVs, shows that the overall success rate of EVLA is high (> 90%) and is not influenced by commonly used parameters, such as wavelength, administered energy, and outcome definition. The heterogeneity of the trials is high.

#### Invited commentary

243 **If it Looks Like a Duck, Swims Like a Duck, and Quacks Like a Duck, Then it Probably is a Duck. What “The Duck Test” Tells us About Systematic Reviews and Meta-Analyses of LEED and Other EVLA Parameters**

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*S.A.S. Hamann, S.K. van der Velden and M.G.R. De Maeseneer*

This prospective study (13 patients - 15 limbs) reports that EVTA, with or without high ligation, is safe and effective to treat incompetent saphenous veins with an aneurysm close to the junction.

### BASIC SCIENCE AND TRANSLATIONAL MEDICINE

249 **Single Muscle Fibre Contractility Testing in Rats to Quantify Ischaemic Muscle Damage During Reperfusion Injury**

*E. Gok, F. Alghanem, E. Lim, D. Sarver, L. Eckhardt, S. Christensen, M. Hoenerhoff, C. Mendias and K. Ozer*

This experimental study (n = 24 rats) demonstrates an inverse relationship between single muscle fiber contractility and neutrophil infiltration during reperfusion. Contractile force is reduced as early as 48 h following hind limb reperfusion.

Invited commentary

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*I.C.J.H. Post and C.G. Vos*

This meta-analysis, encompassing 32 studies and 1316 patients with open abdominal aortic graft infection, reports that the lowest 30 day mortality and best one year survival are obtained with in situ repair using prosthetic grafts, but infection recurrence rate is high. Collection of large prospective data is needed.

Invited commentary

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*A. Lejay, H. Diener and N. Chakfe*

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*L.J. Nayahangan, I. Van Herzele, L. Konge, I. Koncar, E. Cieri, A. Mansilha, S. Debus and J.P. Eiberg*

This three round modified Delphi survey identifies basic open vascular skills, basic endovascular skills, vascular imaging interpretation, femoral endarterectomy, and open peripheral bypass as the top five procedures that should be included in a future simulation based curriculum in vascular surgery.

292 **The Impact of Operating Surgeon Experience, Supervised Trainee vs. Trained Surgeon, in Vascular Surgery Procedures: A Systematic Review and Meta-Analysis**

*M.F. Bath, A.I. Awopetu, P.W. Stather, U. Sadat, K. Varty and P.D. Hayes*

This meta-analysis, which includes 16 studies and 7017 procedures, shows that, with appropriate training and suitable experience, supervised trainees can perform surgical procedures (major lower limb amputation, fistula formation, carotid endarterectomy) without any detriment to patient care.

Invited commentary

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**Editor's Choice:** This paper has been selected by the Editor to be made freely available online.

 Additional material available online: <http://www.sciencedirect.com/science/journal/10785884/58>