

# European Journal of Vascular & Endovascular Surgery

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CONTENTS

## EDITORIAL

- 637 **Proposed NICE Abdominal Aortic Aneurysm Repair Guidelines: Swinging the Pendulum too Far?**  
*C.D. Liapis, E.D. Avgerinos and H.-H. Eckstein*
- 639 **Are Risks Reduced by Delaying Thoracic Endovascular Aneurysm Repair in Patients with Acute Type B Dissection: Who Can Wait?**  
*R.D. Malgor, E. Verhoeven and A. Katsargyris*

## CONSENSUS DOCUMENT

- 641 **Editor's Choice – Follow-up of Patients After Revascularisation for Peripheral Arterial Diseases: A Consensus Document From the European Society of Cardiology Working Group on Aorta and Peripheral Vascular Diseases and the European Society for Vascular Surgery**  
*M. Venermo, M. Sprynger, I. Desormais, M. Björck, M. Brodmann, T. Cohnert, M. De Carlo, C. Espinola-Klein, S. Kownator, L. Mazzolai, R. Naylor, C. Vlachopoulos, J.-B. Ricco and V. Aboyans*

This consensus document is a complement to the recent ESC/ESVS PAD guidelines for optimal surveillance of revascularised patients beyond the peri-operative period. Combined with vascular history and physical examination, duplex ultrasound scanning is the pivotal image technique for identifying revascularisation failures while other non-invasive techniques at regular intervals can optimise surveillance in specific settings.

## CAROTID DISEASE

- 654 **New Quantitative Digital Image Analysis Method of Histological Features of Carotid Atherosclerotic Plaques**  
*H. Zheng, K. Gasbarrino, J.P. Veinot, C. Lai and S.S. Daskalopoulou*

This study reports on a new quantitative digital image analysis to assess histopathological plaque features, demonstrating higher precision, with more detailed insight into plaque morphology and composition, than the semi-quantitative methods.

- 664 **A Clinical Validation Study of Anatomical Risk Scoring for Procedural Stroke in Patients Treated by Carotid Artery Stenting in the International Carotid Stenting Study**  
*D.D. de Waard, E.E. de Vries, A.E. Huibers, M.M. Arnold, P.J. Nederkoorn, L.C. van Dijk, A. van der Lugt, P.J. Koudstaal, L.H. Bonati, M.M. Brown and G.J. de Borst*

This *post hoc* analysis (n = 275) reports no significant association between anatomical complexity, as defined by the Delphi anatomical score, and procedural stroke risk. As the study is underpowered to detect group differences, confirmation with larger samples is needed.

## AORTIC DISEASE

- 671 **Editor's Choice – Abdominal Compartment Syndrome after Surgery for Abdominal Aortic Aneurysm: Subgroups, Risk Factors, and Outcome**  
*S. Ersryd, K. Djavani Gidlund, A. Wanhainen, L. Smith and M. Björck*

This study reports an incidence of 1.4% (120/8765) of abdominal compartment syndrome (ACS) after surgery for infrarenal AAA. ACS is associated with a high mortality (50%), irrespective of the main physiopathological finding (bowel ischaemia, post-operative bleeding, or general oedema) and timing of decompression laparotomy (DL). The duration of intra-abdominal hypertension prior to DL predicts the need for renal replacement therapy, emphasising the need for careful monitoring of intra-abdominal pressure.

## CONTENTS—continued

### Invited commentary

- 680 **Abdominal Compartment Syndrome. Caution: Contents Under Pressure**

*J.D. Kakisis*

- 681 **Impact of Post-EVAR Graft Limb Kinking in EVAR Limb Occlusion: Aetiology, Early Diagnosis, and Management**

*A. Coelho, C. Nogueira, M. Lobo, R. Gouveia, J. Campos, R. Augusto, N. Coelho, A.C. Semião, J.P. Ribeiro and A. Canedo*

This systematic review, encompassing 55 articles and 27,509 patients, reports on the impact of endograft kinking on endograft limb occlusion, with an analysis of risk factors, prevention, diagnosis, and treatment. Adjunctive stenting is an effective prophylaxis for selected high risk limbs, but intra-operative identification is difficult.

- 690 **Temporal Trends and Management of Acute Aortic Occlusion: A 21 Year Experience**

*O. Grip, A. Wanhainen and M. Björck*

This large report (n = 693) from the Swedvasc shows that mortality after surgical treatment of acute aortic occlusion (AAO) decreases over time (from 25.5% in 1994-2000 to 15.5% in 2008-2014 for 30 day mortality). The aetiologies of AAO are native artery thrombosis, saddle embolus, and occluded graft/stent/stent grafts, with the proportion of the latter aetiology increasing over time.

### Invited commentary

- 697 **Acute Aortic Occlusion Remains a Challenge for the Vascular Surgeon: Is Experience the Key to Success?**

*P. Settembrini and A.M. Settembrini*

- 698 **Effect of Endovascular Treatment Rate on Population Level Outcomes and Survival After Intact Abdominal Aortic Aneurysm Repair**

*P. Paajanen, K. Mäkinen, J. Karjalainen, P. Saari, J. Virkkunen, T. Partio, J. Turtainen and J.M. Kärkkäinen*

Comparing four geographically adjacent populations with identical demographics, similar patient characteristics, and similar indication for the treatment of intact AAAs, this study reports that EVAR is performed with rates between populations ranging from 38% to 74%. Despite these disparities, there is no significant difference in early or late outcomes, such as mortality, complications, and re-interventions.

- 708 **Aortic and Systemic Arterial Stiffness Responses to Acute Exercise in Patients With Small Abdominal Aortic Aneurysms**

*M. Perissiou, T.G. Bailey, M. Windsor, K. Greaves, M.C.Y. Nam, F.D. Russell, J. O'Donnell, R. Magee, P. Jha, K. Schulze, A.S. Leicht, J. Golledge and C.D. Askew*

This study reports that the changes in aortic and systemic arterial stiffness are lower in patients with AAA after exercise compared with seated rest, with an effect most marked following higher intensity interval exercise. This attenuation in arterial stiffness suggests an acute cardiovascular benefit of exercise in AAA patients.

## PERIPHERAL ARTERIAL DISEASE

- 719 **Interwoven Nitinol Stents versus Drug Eluting Stents in the Femoro-Popliteal Segment: A Propensity Matched Analysis**

*A. Saratzis, N. Rudarakanchana, S. Patel, A. Diamantopoulos, T. Lea, B. Corbo, G. Gradinariu, K. Katsanos and H. Zayed on behalf of Guy's and St Thomas' Vascular Research Collaborative*

At a median follow up of two years, this study (n = 296; 121 matched pairs) reports that the incidence of target lesion restenosis > 50%, stent occlusion, major amputation, need for re-intervention, and death is similar following FP PTA with either nitinol stents or drug eluting stents, regardless of plaque calcification and patient characteristics.

### Invited commentary

- 728 **A Paclitaxel Free Alternative in the War Against Drugs?**

*M. Teraa and C.E.V.B. Hazenberg*

## CONTENTS—continued

- 729 **Major Amputation Rates in Patients with Peripheral Arterial Disease Aged 50 Years and Over in Denmark during the period 1997–2014 and their Relationship with Demographics, Risk Factors, and Vascular Services**

*L.S. Londero, A. Hoegh, K. Houliand and J. Lindholt*

This nationwide study, analysing 13 075 first time amputations performed during 1997-2014, reports that its incidence decreases from 41.67 per 100 000 citizens  $\geq$  50 years of age in 1997-2002 to 32.53 in 2009-2014, but with municipal differences. In parallel, general cardiovascular prevention and revascularisation rates increase, but few patients have revascularisation prior to amputation.

- 738 **Quality Indicators in Peripheral Arterial Occlusive Disease Treatment: A Systematic Review**

*S. Hischke, H.C. Rieß, M.K. Bublitz, L. Kriston, T. Schwaneberg, M. Härter, D. Bertges, E.S. Debus and C.-A. Behrendt*

There is a lack of published evidence based quality indicators concerning invasive treatment for PAD in the literature. Thirty-one indicators from the databases of professional vascular medical organisations are not incorporated in prior guidelines, while no indicator related to patient reported outcomes could be identified.

### BASIC SCIENCE AND TRANSLATIONAL MEDICINE

- 746 **Quantitative Stent Graft Motion in ECG Gated CT by Image Registration and Segmentation: In Vitro Validation and Preliminary Clinical Results**

*M.A. Koenrades, E.M. Struijs, A. Klein, H. Kuipers, M.M.P.J. Reijnen, C.H. Slump and R.H. Geelkerken*

A novel methodology to quantify and visualise stent graft motion in multiphasic ECG gated CT is validated *in vitro* and tested *in vivo*, enabling further exploration of *in situ* motion of different stent grafts and branch stents and their interaction with native vessels.

### VASCULAR ACCESS

- 756 **Endoscopic Superficialisation of Haemodialysis Arteriovenous Fistulas in Obese Patients – Safety, Feasibility, and Outcomes**

*J. Zeindler, S. Richarz, M. Franchin, S.D. Soysal, L. Gürke and A. Isaak*

This study (n = 12) reports that endoscopic superficialisation (ES) of the cephalic vein is safe and effective. Twelve weeks post-operatively, the depth of the cephalic vein is reduced from a mean of 10.1 mm to 4.3 mm. In all but one patient, haemodialysis is performed successfully following ES.

#### Invited commentary

- 761 **Liposuction Is Not Just an Aesthetic Surgery Procedure**

*P. Balaz and S. O'Neill*

### MISCELLANEOUS

- 762 **The Effect of Frailty on Outcome After Vascular Surgery**

*L. Visser, L.B.D. Banning, M. El Mounni, C.J. Zeebregts and R.A. Pol*

This study (n = 630) reports that frailty is associated with an increased risk of post-operative complications and discharge to a nursing home after vascular surgery, but not with a higher risk of readmission. Some frailty domains, such as mobility, nutrition, cognition, and psychosocial condition, appear to have a more pronounced importance.

#### Invited commentary

- 770 **“Prediction is Difficult, Especially if it is About The Future” – Old Danish Proverb**

*P. Vikatmaa*

- 771 **The Consequences of Negligence Claims in Arterial Surgery – An Analysis of Two Periods with an Increasing Use of Endovascular Treatment**

*D. Bergqvist, L. Hafström and P. Gustafson*

Between the two three-year periods (2005-2007 and 2012-2014), there is an increase in negligence claims, but not in compensated ones. The increased use of endovascular interventions does not influence the pattern of compensated negligence claims.

### CONTINUED MEDICAL EDUCATION

- 777 **Which Mouse Model of Abdominal Aortic Aneurysm Deserves Triple A Status?**

*V.N. Tedjawirja and V. de Waard*

This Editorial discusses the benefits and limits of three AAA mouse models: the angiotensin II model, the elastase perfusion model, and the calcium chloride model.

## CONTENTS—continued

779 **Multiple Choice Questions**

782 Correspondence

783 Corrigendum

### JVS ABSTRACTS

784 Selected Abstracts from the November Issues of the Journal of Vascular Surgery and the Journal of Vascular Surgery: Venous and Lymphatic Disorders

### TRANSLATED ABSTRACTS

e25 EJVES vol. 58, issue 5 (November 2019) - Spanish Translated Abstracts 

788 Forthcoming Events

### COUP D'OEILS

663 **A Rare Case of Arterial Tortuosity Syndrome**

*G. Pagliariccio and M. Macchini*

670 **A Mycotic Saccular Aneurysm Diagnosed With <sup>18</sup>F-Labelled Fluoro-2-Deoxyglucose Positron Emission Tomography/Computed Tomography Scanning**

*S. Papadoulas and S.K. Kakkos*

679 **Placement of a Central Venous Catheter Into the Right Vertebral Artery Despite Ultrasound Guidance**

*R.C. Lind and B. Arvidsson*

689 **Retrograde Femoral Arterial Endoprosthesis Insertion for Access Site Haemorrhage After Percutaneous Endovascular Aneurysm Repair**

*K.M. Bates and A. Chaudhuri*

745 **False Aneurysm After Gamma-nail Surgery: A Rare Complication**

*M. Zimmermann and T. Couture*

776 **Inadvertent Placement of a Central Dialysis Catheter in the Right Internal Mammary Vein**

*G. Gemayel and M. Bednarkiewicz*

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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>