

One year on: Test your knowledge from the previous year

1. **What is the rate of ipsilateral stroke with a carotid stenosis $\geq 70\%$ following coronary artery bypass grafting?**¹
 - A. 100%
 - B. 90%
 - C. 45%
 - D. 30%
 - E. 15%

2. **Which of these statements is NOT TRUE regarding the exercise training to improve walking distance?**²
 - A. Supervised exercise training is more cost effective than unsupervised exercise training.
 - B. Supervised exercise training is proven to improve quality of life.
 - C. Supervised exercise training improves ABI.
 - D. Supervised exercise training is more effective than unsupervised exercise training.
 - E. Routine cardiac screening before the start of supervised exercise training is not required

3. **Which of the following statements is incorrect with regards perivascular adipose tissue (PVAT)?**³
 - A. It is a special depot of adipose tissue that surrounds the blood vessels.
 - B. It acts only as a supportive tissue.
 - C. It is a paracrine and endocrine organ that produces a wide range of biologically active molecules.
 - D. Excessive accumulation of inflamed or dysfunctional PVAT has been proposed to be a major risk factor for cardiovascular diseases.
 - E. The Hounsfield units range from -295 to -145 HU is used to identify pixels containing adipose tissue on CT imaging

4. **The most important determinant of deep venous stenting success appears to be:**⁴
 - A. The length of the lesion treated
 - B. The quality of the inflow
 - C. The type of stent used
 - D. Underlying patient thrombophilia
 - E. The time since first DVT

5. **What is the correlation between intraplaque neoangiogenesis (IPN) and contrast enhanced ultrasound (CEUS) in asymptomatic carotid atherosclerotic disease (ACAD)?**⁵
 - A. High IPN expression is always directly correlated with positive CEUS enhancement
 - B. High IPN expression is always inversely correlated with positive CEUS enhancement
 - C. Low IPN expression is always directly correlated with positive CEUS enhancement
 - D. Low IPN expression is always inversely correlated with positive CEUS enhancement
 - E. High IPN expression is directly correlated with positive CEUS enhancement only in histologically-proven unvulnerable plaques (i.e. AHA type IV/V plaques)

6. **Which branch of left subclavian artery is the most important to consider during TEVAR?**⁶
 - A. Vertebral artery
 - B. Internal thoracic artery
 - C. Axillary artery
 - D. Thyrocervical trunk
 - E. Intercostal artery

- 7. In the mouse model reported by Lejay et al critical limb ischemia induces⁷**
- Increased mitochondrial respiration
 - Increased oxidative stress
 - Increased calcium retention capacity
 - Decreased membrane permeability
 - Lower fluorescence with a dihydroethidium stain
- 8. Which are the three main risk factors for amputation in revascularized CLTI patients?⁸**
- Female gender, renal insufficiency and diabetes
 - Male gender, renal insufficiency and diabetes
 - Renal insufficiency, diabetes and hypertension
 - COPD, angina pectoris and hypertension
 - Ischemic stroke, renal insufficiency and heart failure
- 9. Tumescence local anaesthesia in endothermal ablation serves which the following four functions:⁹**
- Provides hydrodissection of surrounding soft tissue, increases thermal conduction to the vein, prevents movement of the vein during ablation, provides postoperative compression.
 - Provides anaesthesia, hydrodissection of surrounding soft tissues and nerves away from the vein, acts as a heat sink to protect surrounding tissues and places the intima in closer proximity to the heat source via venous compression.
 - Provides anaesthesia, ensures adrenaline is dissipated appropriately to vasoconstrict the venules and arterioles, places the venous intima in closer proximity to the heat source via compression, acts as a distraction for patients during ablation.
 - Provides systemic anaesthesia, hydrodissection of surrounding soft tissues and nerves away from the vein, acts as a heat sink to protect surrounding tissues and places the intima in closer proximity to the heat source via venous compression
 - Hydrodissection of the surrounding soft tissues and nerves away from the vein, acts as a vasoconstrictor, increases the efficacy of the local anaesthetic by dilution, places pressure on the vein to compress it onto the ablation device.
- 10. Very urgent carotid endarterectomy performed less than 48 h from the index event is associated with increased risk of which of the following complications, when compared to carotid endarterectomy delayed beyond 48 h?¹⁰**
- Stroke
 - Transient ischaemic attack
 - Myocardial infarction
 - Death
 - Haemorrhage

References

- Santarpino G, Nicolini F, De Feo M, Dalén M, Fischlein T, Perrotti A, et al. Prognostic Impact of Asymptomatic Carotid Artery Stenosis in Patients Undergoing coronary Artery Bypass Grafting. *Eur J Vasc Endovascular Surg* 2018;56:741-748
- Vossen R J, Vahl A C, Leijdekkers V J, Montauban van Swijndregt A D, Balm R, Long-term Clinical Outcomes of Percutaneous Transluminal Angioplasty with Optional Stenting in Patients with Superficial Femoral Artery Disease: a Retrospective, Observational Analysis. *Eur J Vasc Endovascular Surg* 2018;56:690-698
- Dias-Neto M, Meekel J P, van Schaik T G, Hoozemans J, Sousa-Nunes F, Henriques-Coelho T, et al. High Density of Periaortic adipose tissue in Abdominal Aortic Aneurysm. *Eur J Vasc Endovascular Surg*, 2018;56:663-671
- Black S, Gwozdz A, Karunanithy N, Silickas J, Breen K, Hunt B, et al. Two Year Outcome After Chronic Iliac Vein Occlusion Recanalisation Using the Vici Venous Stent®. *Eur J Vasc Endovascular Surg* 2018;56:710-718
- D'Oria M, Chiarandini S, Pipitone M D, Fisicaro M, Calvagna C, Bussani R, et al. Contrast Enhanced Ultrasound (CEUS) is not Able to Identify Vulnerable Plaques in Asymptomatic Carotid Atherosclerotic Disease. *Eur J Vasc Endovascular Surg* 2018;56:632-642
- Huang Q, Chen X M, Yang H, Lin Q N, Qin X, Effect of left Subclavian Artery Revascularisation in Thoracic Endovascular Aortic Repair: a Systematic Review and Meta-analysis. *Eur J Vasc Endovascular Surg* 2018;56:644-651

- 7 Lejay A, Paradis S, Lambert A, Charles A-L, Talha S, Enache I, et al. N-acetyl Cysteine Restores Limb Function, Improves Mitochondrial Respiration, and Reduces Oxidative Stress in a Murine Model of critical Limb Ischaemia. *Eur J Vasc Endovascular Surg* 2018;56:730-738
- 8 Fridh E B, Andersson M, Thuresson M, Sigvant B, Kragsterman B, Johansson S, et al. Impact of Comorbidity, Medication, and Gender on Amputation rate Following Revascularisation for Chronic limb Threatening Ischaemia. *Eur J Vasc Endovascular Surg* 2018;56:681-688
- 9 Nandhra S, Wallace T, El-Sheikha J, Leung C, Carradice D, Chetter I, A Randomised Clinical Trial of Buffered Tumescant Local Anaesthesia during Endothermal Ablation for Superficial Venous Incompetence. *Eur J Vasc Endovascular Surg* 2018;56:699-708
- 10 Milgrom D, Hajibandeh S, Hajibandeh S, Antoniou S A, Torella F, Antoniou G A, Systematic Review and Meta-analysis of Very urgent Carotid Intervention for Symptomatic Carotid Disease. *Eur J Vasc Endovascular Surg* 2018;56:622-631

Answers from previous issue (October 2019):

1B, 2B, 3C, 4A, 5D, 6D, 7C, 8A, 9D, 10A, 11C, 12A, 13B