



**Matthew Gawel** has completed this personal reflection on **02/10/2024**

**Paper:** Winter 2023/24 CPD questions

### **Personal Reflection:**

#### Description of the Learning

The papers provided valuable insights into the role of vascular ultrasound in diagnosis and management of vascular abnormalities and chronic limb-threatening ischaemia. The first focused on effectiveness of Duplex ultrasound in diagnosing and classifying superficial soft tissue vascular anomalies, while the second discussed the use of transcatheter arterialisation of the deep venous system as a treatment for CLTI.

#### Evaluation

The first paper highlighted a significant role in Duplex ultrasound for the initial diagnosis, clarification, and follow-up of vascular malformations, emphasising its non-invasive nature, cost-effectiveness, and accuracy. The second demonstrated the technique of transcatheter arterialisation of the deep venous system to improve outcomes in patients with no conventional revascularisation options, showing a novel approach to CLTI.

#### Analysis

From my perspective, the first paper reinforced the importance of Duplex ultrasound as a primary diagnostic tool and also for surveillance. The detailed description of vascular malformations/anomalies and their ultrasound features provides a guide for clinical practice, accurate diagnosis, and treatment planning. The second paper has introduced an interesting interventional technique that could significantly impact patient care. If this procedure were to become more common place, it may require consideration of the unusual anatomy observed during an ultrasound examination. Additionally, assessment of stenoses and post-arterialisation changes may need to be studied and documented; for example, similar to arterialisation of a fistula vein.

#### Conclusion

The papers have shown the value of duplex/triplex ultrasound in vascular diagnostics and treatment. The first has validated the use in vascular anomalies. The second has expanded the scope of future possible treatments and should be considered when scanning in the future.

#### Action Plan

1. Continue researching into novel techniques.
2. Maintain good connections with the vascular consultants, with awareness of any novel procedures being implemented, and continue attending MDT meetings.
3. Participate in technique/good clinical practice sharing across the department and at conferences.
4. Ensure there is understanding of imaging requirements when novel techniques are implemented in collaboration with the vascular consultants and radiologists.
5. Ensure there is appropriate surveillance in place for these patients.

6. Quality assurance and improvement activities as these practices become more common place.
7. Ensure competency is maintained in examination of different vascular anomalies/malformations.
8. Request second opinions and gain experience from senior colleagues.
9. Consider attending another hospital where these are more common (ie. specialist units).