



THE SOCIETY FOR  
VASCULAR TECHNOLOGY OF  
GREAT BRITAIN AND IRELAND

**Minta Palmer** has completed this personal reflection on **05/02/2024**

**Paper:** Summer 2023 CPD Questions

**Personal Reflection:**

Description of the Learning: Summer 2023 CPD Questions - Duplex ultrasound derived maximal systolic acceleration can be a reliable and rapid alternative to ankle brachial pressure indices for the diabetic population with lower extremity arterial disease; a prospective, observational cohort study

Analysis: ABPI is an important first-line tool in the diagnosis of peripheral artery disease, however can be very limited in the diabetic patient. Ulceration and peripheral calcification make ABPI measurements unreliable, which makes grading the degree of arterial obstruction difficult. This was a small prospective study to determine whether Systolic Rise Time and maximal systolic acceleration can be used to accurately determine the severity of disease. 28 patients participated in the study, and SRT, AccMax, PSV, and ABPIs were measured. A full limb arterial scan was performed to determine the pattern of arterial obstruction.

Conclusion: AccMax was shown to be a better predictor of severity of arterial disease, as it is a measure of the pressure gradient. As disease severity increases, the pressure drops, which in turn caused the AccMax measurement to drop as well. PSV and SRT did not have good correlation to ABPIs or disease severity.

Benefit to Current Practice: This would be a beneficial measurement for our diabetic patients, as many of them present to the scanning room with significant ulceration and peripheral calcification. Many times a normal ABPI is calculated on patients, who then have significant stenoses identified on Duplex ultrasound examination. This is a quick test to perform, and would add virtually no additional time to the scan, and could serve as another parameter to validate the severity of disease, especially when comparing to the less symptomatic limb.

Benefit to Service User: Again, this would be a quick measurement to take, which would require no additional preparation for the patient. It would be less painful for the patient, as a blood pressure cuff would not need to be applied or inflated. If this could be used in combination with the Duplex ultrasound examination, it could provide the vascular consultants with more information to help determine if intervention is necessary.

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Description of the Learning: Summer 2023 CPD Questions - Giant cell arteritis: reviewing the advancing diagnostics and management

Analysis: Giant cell arteritis is the most common form of vasculitis, and its prevalence in England is increasing. Despite this, there is diagnostic uncertainty due to its varied presentation. Diagnosis is made on a clinical basis, with additional input from blood tests, ultrasound, or temporal artery biopsy.

Conclusion: There is much discordance regarding symptomology and diagnosis of GCA. In patients who experience vision loss as a symptom, there is little chance of recovery.

Benefit to Current Practice: This was a very interesting and in-depth overview of GCA, its diagnosis, and its management. I don't feel that this will change my current practice. Our trust performs TAB as standard for diagnosis, and there are not enough patients referred into our clinics for our staff to maintain the level of proficiency needed for accurate detection.

Benefit to Service User: Having clinicians fully understand the mechanisms behind GCA could potentially prevent vision loss in those patients who would be vulnerable.