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Paper: Summer 2023 CPD Questions

Personal Reflection:

Description of Learning

I have gained insights into the diagnostic techniques for these two vascular conditions. The first appears more theoretical and is more nascent research, but the second emphasises the role, benefit, and cost-saving of ultrasound in a more defined and well-researched way. Although maximal systolic acceleration appears a reliable alternative to ABPI in diabetic patients, I believe that further research is required. The second paper defines the techniques for assessment of GCA, and importantly this is a method we use in our department.

Evaluation

Both papers are highly relevant to my practice, but I would argue that the GCA paper is more relevant. Although AccMax offers a promising alternative, additional research with SVT endorsement would be required prior to implementation outside of a research setting. The alternative that duplex ultrasound provides for GCA is clear, with a non-invasive cost effective alternative to TAB.

Analysis

AccMax has the potential to streamline the diagnostic process for PAD in the future where ABPI is unreliable, and may have further utility in those without diabetes. It could reduce the need for a lengthy ABPI for screening. The use of ultrasound for GCA would align with trends towards moving away from TAB and toward GCA when it is safe to do so and the clinical suspicion is not high. The ability to detect GCA through ultrasound can lead to earlier diagnosis, and potentially prevent severe complications such as vision loss. It should be noted that patients are started on steroids early prior to GCA being ruled out, so the actual impact on risk is less than if they were awaiting treatment prior to biopsy results. But it is certainly a less invasive method when safe to do so.

Conclusion

Both papers highlight vascular ultrasound techniques and diagnostics. The adoption of AccMax may become practice in the future, but additional research is required prior to it becoming routine clinical practice. The use of ultrasound for GCA is being well established in multiple departments, and will likely become even more common-practice as our confidence and skill in the assessment increases. The findings across the board reinforce the importance of staying up to date with technological advancements and the future integration of novel techniques into clinical practice.

Action Plan

1. Continue use of TA US in assessment of GCA.
2. Consider AccMax for future research opportunities, particularly with trainees and interdepartmental research.

3. Continue reviewing the literature for additional developments in both areas.
4. Educate colleagues on this research.