

CME Self-test Course Objectives: Upon completion of reading and studying “ Techniques in Noninvasive Vascular Diagnosis”, the participant should be able to:

1. Describe basic Doppler and color Doppler fundamentals as they apply to vascular diagnosis.
2. Describe cerebrovascular, upper and lower venous and arterial anatomy .
3. List and apply diagnostic criteria for carotid, venous, and arterial disease determination.
4. Describe normal venous and arterial hemodynamics and how flow patterns are altered by disease.
5. Describe abdominal vascular anatomy.
6. List diagnostic criteria for abdominal vascular duplex ultrasound exams.
7. Describe bypass and hemodialysis grafts/fistulas, and list normal and abnormal flow velocity parameters.
8. Describe methods of physiologic, indirect testing for upper and lower arterial disease.
9. Describe potential collateral pathways, and Doppler waveforms in the presence of subclavian or innominate artery obstruction.
10. Change and adjust appropriate imaging, Doppler and Color Doppler controls to optimize exam quality.
11. Recognize Doppler and imaging artifacts and describe how they occur.
12. Describe methods for assessing aneurysms and pseudoaneurysms.
13. Describe methods for evaluating superficial and deep venous insufficiency.
14. Describe various disease processes that affect upper and lower extremity arteries and veins.
15. Describe intracranial vascular anatomy and transcranial Doppler (TCD) methods.