



Introduction to Transcranial Doppler Imaging

Philips Ultrasound
University
Vascular 370

Transcranial Doppler Imaging (TCDI) is a non-invasive vascular duplex test used to evaluate the circle of Willis and the vertebrobasilar arteries using various acoustic windows. TCDI evaluates arterial flow distribution, intracerebral hemodynamics, and the presence of focal arterial lesions using B-mode, spectral and color Doppler imaging modalities. The examination is a very useful tool for the identification and monitoring of intracranial vasospasm; identification and monitoring of vasculopathy in patients with Sickle Cell anemia; assessment of brain death; intraoperative monitoring of intracranial flow during surgery; and many other clinical applications.

Course Description

This one-day introductory course is led by Muhammad Hasan, RVPI. Course content will be delivered through a balanced use of lectures, case studies and hands-on sessions using both the iU22 and iE33 systems.

This course is intended for either practicing sonographers or physicians with some prior scanning experience who want to learn how to evaluate the intracerebral arterial circulation with ultrasound.

Prerequisites

Must be a practicing sonographer or a physician with some prior duplex imaging experience.

Locations

Course will be held at the various Philips training centers located in Atlanta, GA; Bothell, WA; Cleveland, OH.

PHILIPS

Introduction to Transcranial Doppler Imaging (Vasc370)



Muhammad Hasan,
MBBCh, RPVI, RVT

“Philips Ultrasound Clinical Education has developed a solid one-day program to meet the needs of those sonographers who are interested in learning another exam type that will enable them to serve a wider population of patients with neurological disorders. With an experienced team of instructors and an ideal combination of lecture and one-on-one, hands-on training, this course is an excellent learning experience available for sonographers looking to re-energize their careers and add this fascinating modality to their skillset.”

Muhammad Hasan, MBBCh, RPVI, RVT

Course objectives

Upon successful completion of this program, you should be able to:

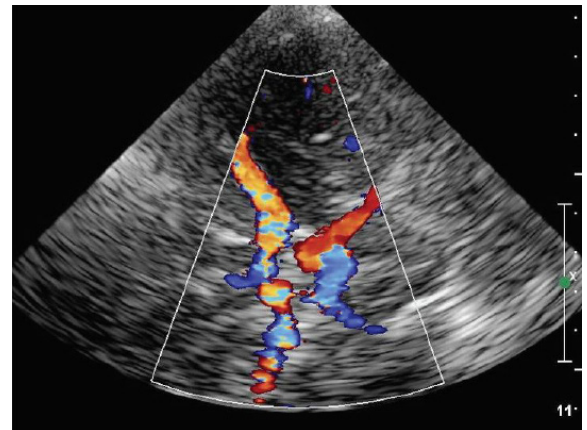
- Describe reasons for performing an intracranial cerebrovascular evaluation
- Discuss normal cerebrovascular anatomy and collateral pathways
- Discuss hemodynamic considerations in cerebrovascular disease
- Describe examination techniques for general prerequisites, equipment, acoustic windows, vessel identification, normal Doppler imaging characteristics, diagnostic approach – depth and flow velocity criteria for a normal examination.
- Explain the effects of extracranial carotid occlusion on imaging the intracranial circulation
- Describe intracranial stenosis and occlusions
- Discuss TCDI in monitoring of cerebral vasospasm, in intraoperative monitoring, and the assessment of Brain Death
- Describe Functional Reserve Testing
- Review case studies with Angiography, MRA and CTA Correlations

Faculty

- Muhammad Hasan, MBBCh, RPVI, RVT
- Philips Clinical Education Specialists

For more information

Contact Philips Ultrasound Clinical Education at 800.522.7022 and visit our education catalog: www.learningconnection.philips.com/ultrasound



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