

Ultrasound

Vasc 370

# **Advanced Transcranial Doppler Imaging**

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.

## **Course Description**

This one-day program provides the advanced skills needed for those with prior knowledge of performing Transcranial Doppler Imaging (TCDI). This course goes beyond the fundamentals to explore how TCDI is used in the identifying and monitoring of cerebral vasospasm, sickle cell disease, intraoperative monitoring, assessing for Brain Death, functional reserve testing as well as the diagnosis of PFO using TCDI bubble study. Educational material will be presented in the form of detailed lectures, correlative case studies as well as supervised hands-on scanning sessions.

## **Course Objectives**

Upon successful completion of the program, attendees will be able to:

- Fully understand the normal intracerebral arterial anatomy and collateral pathways
- Explain and discuss proper indications for TCDI
- Explain and discuss the basic imaging principles of Transcranial Doppler Imaging
- Describe acoustic windows, equipment and technique for a complete exam.
- Describe typical depths, flow velocities and spectral Doppler waveforms morphology for normal cerebral circulation.
- Explain the effects extracranial arterial stenosis/ occlusion has on the cerebral circulation.
- Identify the limitations of TCDI
- Demonstrate the appearance of focal intracranial arterial stenosis or occlusion.

• Describe how TCDI is used in the identification and monitoring of cerebral vasospasm, sickle cell disease, intraoperative monitoring, assessing for brain death, functional reserve testing as well as the diagnosis of PFO using TCDI bubble study.



## Advanced Transcranial Doppler Imaging (Vasc 370)

In today's competitive and dynamic healthcare climate, it is critical to use your medical imaging systems to their fullest potential. Our goal at Philips Healthcare is to provide the clinical education you need to make the most of your equipment investment.



#### Prerequisite

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



## **Facilitators and Speakers**



#### Muhammad Hasan, MD, MBBCh, RPVI, RVT

Director of Cardiovascular Clinical Education, Credentialling and Accreditation Baptist Health, South Florida. Graduate of Faculty

of Medicine, Cardiovascular Medicine, Cairo University. Intersocietal Accreditation Commission (IAC) Vascular Testing Board of Directors representing the American Institute of Ultrasound in Medicine (AIUM)

#### For more information

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

## Please Visit www.learningconnection.philips.com/en/ultrasound-education

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