

Update on the IAC Vascular Testing Carotid Diagnostic Criteria Project

MARCH 2017 | In 2014, IAC Vascular Testing published a white paper document regarding carotid diagnostic criteria and its activities in this arena¹. The document discusses the variability in carotid stenosis interpretation across accredited facilities and summarizes data from surveys of IAC accredited laboratories that support efforts toward standardization. The document describes plans to internally validate carotid diagnostic criteria for use in IAC accredited facilities, including commissioning of a carotid research committee.

As an update, the IAC Vascular Testing Carotid Research Committee met on February 17, 2017 to review progress of its diagnostic criteria project. Eleven clinical sites have submitted protocol-directed case study materials. At this time, all 210 complete case studies (bilateral carotid duplex studies and catheter-based angiograms) have been collected and technical data has been abstracted from these studies. The angiograms and ultrasounds are now undergoing interpretive review. Study data will be analyzed in 2017, with plans for publication and dissemination of the study results in 2018.

The IAC will continue to provide updates regarding this project as it moves ahead. With regard to which carotid diagnostic criteria to use at the present time, IAC Vascular Testing continues to recommend that in the absence of internally validated single set of diagnostic criteria, facilities should consider the use of one single set of standardized diagnostic criteria: The Society of Radiologists in Ultrasound (SRU) Criteria for Carotid Stenosis Interpretation 2. Facilities that have internally validated their own criteria may continue to use these criteria.

Participating sites in the diagnostic criteria research project:

Cleveland Clinic (Heather Gornik, MD, RVT, RPVI; Alia G. Grattan, RDMS, RVT)
Novant Health Heart and Vascular Institute (Kelly M. Estes RT(R), RDMS, RVT, RDCS)
Riverside Radiology (Lucy LaPerna, DO, FSVM, RPVI, RVT)
TriHealth (Joann Lohr, MD, FACS, RVT)
University at Buffalo (Adnan Siddiqui, MD, PhD)
University Hospital and Clinics (Michel E. Comeaux, RN, BSN, RVT, RDMS, FSVU)
University of Maryland (Michael Lilly, MD, RVT, RPVI)
University of Miami (Tatjana Rundek, MD, PhD)
University of Pittsburgh (Steven Leers, MD, RVT)
University of Southern California (Susana Robison, BS, RVT, FASE)
University of Washington (R. Eugene Zierler, MD, RPVI)

Members of the IAC Vascular Testing Carotid Research Committee:

Andrei V. Alexandrov, MD, RVT; James Benenati, MD, FSIR; Nirvikar Dahiya, MD, FSRU; Hannah Gardener, PhD (study statistician), Heather Gornik, MD, RVT, RPVI; Naomi Hamburg, MD, MS, RPVI, FASE; Marge Hutchisson, BS, RVT, RDCS, RPhS (IAC); Ann Marie Kupinski, PhD, RVT, RDMS; Steven Leers, MD, RVT; Michael Lilly, MD, RVT, RPVI; Joann Lohr, MD, FACS, RVT; Shelly McManamon, RVT (IAC); Laurence Needleman, MD; John S. Pellerito, MD, FACR, FSRU, FAIUM; Ken Rholl, MD; Tatjana Rundek, MD, PhD; Adnan Siddiqui, MD, PhD; Melissa A. Vickery, LPN-B, RVT, FSVU

References:

1. Grant EG, Benson CB, Moneta GL, Alexandrov AV, Baker JD, Bluth EI, et al. Carotid artery stenosis: grayscale and Doppler US diagnosis – Society of Radiologists in Ultrasound Consensus Conference. *Radiology* 2003. pp. 340-6.
2. IAC Vascular Testing White Paper on Carotid Stenosis Interpretation Criteria www.intersocietal.org/vascular/forms/iaccarotidcriteriawhitepaper1-2014.pdf