



**NORTH AMERICAN ARTERY**

## **Expert panel publishes guidance on the use of central blood pressure data in patient care**

-- A new resource in attacking a major health care problem—hypertension

NEW YORK, May 27, 2015 /PRNewswire/ -- A panel of researchers and clinicians from leading medical centers has published recommendations on the use of noninvasive central (aortic) blood pressure data in the *Journal of Clinical Hypertension*. The article, "[Clinical Usage of Pulse Wave Analysis](#)," reports the proceedings of a symposium sponsored by the North American Artery Association.

The panel concluded that analysis of the central pressure waveform, which can be measured noninvasively, provided valuable information when added to traditional brachial blood pressure measurement. Measuring blood pressure in the ascending aorta in addition to brachial blood pressure measurement allows physicians to assess the effects of arterial stiffening and pressure wave reflection, which can increase the blood pressure actually exerted on the heart, brain and kidneys.

In non-invasive central blood pressure measurement, blood pressure taken in the arm is converted by an algorithm to determine blood pressure in the ascending aorta. A graphed pressure wave form is generated which allows physicians to visually assess the effects of the reflected pressure wave (pulse wave analysis). Patients with similar brachial blood pressure levels may have different aortic blood pressure due to arterial stiffening, the effects of drug therapies and other factors such as diabetes and kidney disease which can increase or decrease arterial pressure waves.

Researchers and clinicians focused their recommendations on three areas where pulse wave analysis can make a significant difference in patient care:

- Deciding whether to initiate, intensify or change therapy in younger patients
- Deciding which anti-hypertensive medication to prescribe and when to add additional medications
- Deciding whether drug therapy or lifestyle changes that have reduced brachial pressure have equally reduced central blood pressure

### **Addressing Uncontrolled Hypertension—A Major Health Care Problem**

"Better management of hypertension could make a great difference in reducing heart attacks, strokes, and kidney disease," said Raymond Townsend MD of University of Pennsylvania, president of the North American Artery Association. "The CDC estimates that over 53% of people in the US with high blood pressure have uncontrolled hypertension and that 45% of patients diagnosed with and treated still have uncontrolled hypertension.

(<http://1.usa.gov/1esFpQx>)

"The panel of experienced users of central blood pressure data – in research and clinical practice – was convened to offer guidance to physicians who are now beginning to use pulse wave analysis in assisting the management of hypertension in the office. Publication of our recommendations in the Journal of Clinical Hypertension is a step forward in that effort, since there is little practical office-based guidance," Dr. Townsend concluded.

Participants in the Symposium included physicians from the Perelman School of Medicine, University of Pennsylvania, New York University School of Medicine, Weill Cornell Medical College, Tulane University School of Medicine, the Icahn School of Medicine at Mount Sinai NY, Baystate Medical Center and Tufts University, the James J. Peters VA Medical Center Bronx NY, The Mayo Clinic, Scottsdale AZ and St. Clair Specialty Physicians, Detroit Michigan

North American Artery is a non-profit, non-partisan membership organization for the encouragement, support, and understanding of vascular structure and function and its application to clinical medicine, research and pharmaceutical and medical device development.

For more information, visit [naartery.org](http://naartery.org).