

7 FACTS

ABOUT THE EARLY DETECTION OF PERIPHERAL ARTERIAL DISEASE (PAD) AND PREVENTING VASCULAR COMPLICATIONS

FACT

1

THE CLINICAL EXAM CANNOT ACCURATELY SCREEN FOR PAD

- Physical exam and history under-diagnose PAD¹
- The PAD screening score using the hand-held Doppler has greater diagnostic accuracy than clinical examination¹
- “The QuantaFlo® method can detect PAD with greater accuracy and sensitivity than Doppler ABI”²

FACT

2

PAD SCREENING AND INTERVENTION REDUCES MORTALITY BY 65%

- In a 5-year study of almost 7,500 participants, 22% mortality in subjects with PAD vs 5% in non-PAD subjects³
- Among PAD subjects, use of multiple preventive therapies was associated with 65% lower all-cause mortality ($p=0.02$)³

FACT

3

PAD SCREENING AND INTERVENTION CAN PREVENT AMPUTATIONS

- Out of 2,001 participants, 1,001 randomly selected for screening⁴
- 128 found to be at high risk for PAD and assigned to foot protection program with 2-year follow-up⁴
- One major amputation in the treatment group versus 12 major amputations in the control group ($p<0.01$)⁴

FACT

4

SCREENING AND AWARENESS OF PAD MOTIVATE HEALTHY BEHAVIOR

- 128 participants with almost 55% aware of their PAD diagnosis⁵
- In the regression analysis, knowledge about PAD influenced health promotion behavior in subjects “ $R^2=0.212$, $P=0.032$ ”⁵

FACT

5

RISK SIMILAR IN PAD PATIENTS WITH AND WITHOUT SYMPTOMS

- 6,821 subjects: 836 had asymptomatic PAD and 593 had symptomatic PAD at baseline⁶
- At 5-year follow-up, the risk of mortality was similar in symptomatic and asymptomatic patients, but much lower in non-PAD subjects⁶
- In the primary care setting, the diagnosis of PAD has important prognostic value⁶

FACT

6

EVEN MILD PAD IS A MAJOR CVD RISK FACTOR

- PAD is predictive of cardiovascular and cerebrovascular morbidity and mortality-perhaps more strongly predictive than prior MI⁷
- Recent clinical trials show both lipid therapy and anti platelet therapy prevent cardiovascular disease events in PAD patients⁷
- Given the strong prognostic significance of PAD, ankle-brachial index merits a central role in CVD risk assessment⁷

FACT

7

FUNCTIONAL DECLINE AND DISEASE PROGRESSION SIMILAR IN ASYMPTOMATIC PAD

- Among the 676 participants, 80 had PAD without exertional leg symptoms at baseline. Almost half remained asymptomatic at follow-up; the remainder developed exertion leg symptoms at follow-up visits⁸
- Previously asymptomatic participants with leg symptoms at 2-year follow-up had greater mean functional decline than those who had symptoms at baseline⁸

CONCLUSION

PAD screening has documented value as:

- **A prognostic tool for pre-symptomatic CAD and PAD detection^{1,2,3,5,7}**

- **A way to educate and motivate lipid-lowering medication adherence and increasing exercise^{2,4,5,7}**

- **A way to significantly lower morbidity, mortality, and cost^{3,4,6,7,8}**

¹ Khan NA, Rahim SA, Anand SS, Simel DL, Panju A. Does the clinical examination predict lower extremity peripheral arterial disease? JAMA. 2006 Feb 1;295(5):536-46. Review.

² Schaefer ME, Long JB, Pollick C. Non-Invasive Detection of Vascular Disease in the Arteries of the Lower Extremity; Clinical Evaluation of QuantaFlo(TM) Compared to Doppler and Definitive Imaging. Vasc Dis Mgmt. March 2016 13(3) Supplement.

³ Pande RL, Perlstein TS, Beckman JA, Creager MA. Secondary prevention and mortality in peripheral artery disease: National Health and Nutrition Examination Study, 1999 to 2004. Circulation. 2011 Jul 5;124(1):17-23.

⁴ McCabe CJ, Stevenson RC, Dolan AM. Evaluation of a diabetic foot screening and protection programme. Diabet Med. 1998 Jan;15(1):80-4.

⁵ Yoo Y, Ju Hee Chu LSH, Choi D. Factors influencing health promoting behavior among peripheral arterial disease patients. Korean J Health Promot. 2016 Mar;16(1):37-47.

⁶ Diehm C, Allenberg JR, Pittrow D, Mahn M, Tepohl G, Haberl RL, Darius H, Burghaus I, Trampisch HJ; Mortality and vascular morbidity in older adults with asymptomatic versus symptomatic peripheral artery disease. German Epidemiological Trial on Ankle Brachial Index Study Group. Circulation. 2009 Nov 24;120(21):2053-61

⁷ Golomb BA, Dang TT, Criqui MH. Peripheral arterial disease: morbidity and mortality implications. Circulation. 2006;114:688-69

⁸ McDermott MM, Liu K, Greenland P, Guralnik JM, Criqui MH, Chan C, pearce WH, Scheider JR, Ferrucci L, Celic L, Taylor LM, Vonesh E, Marting GJ, Clark E. Functional decline in peripheral arterial disease: associations with the ankle brachial index and leg symptoms. JAMA, 2004;292(4):453-61