

PCPs Tools to Identify Premature Heart Disease

by Greg Grice January 9, 2018

According to a recent report from the Centers for Disease Control and Prevention Deaths, heart disease and stroke have declined slightly, yet heart disease remains the leading cause of death in the United States, and stroke still ranks 5th. Each year, more than 350,000 Americans have a cardiac arrest outside a hospital - only about 1 in 10 survives.

This makes cardiovascular disease responsible for about one out of every three deaths in the U.S. Additionally, 60% will have a major vascular event before they die. On average, Coronary Artery Disease (**CAD**) will take a life every minute this year. Though the risk of heart disease rises steadily and sharply with age, CAD also appears in younger men.

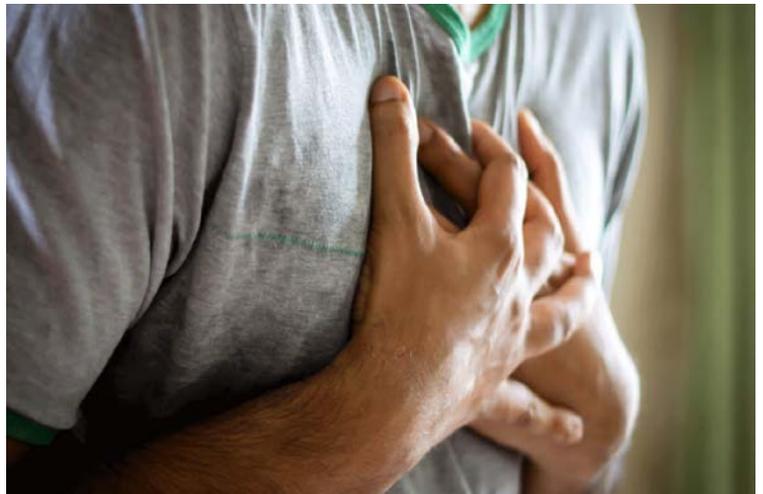


So, even though the average age for a first heart attack in men is 65, up to 10% of all heart attacks occur before age 45 (mostly men.) This should serve as a reminder that neither doctor or their male patients should ignore CAD warning symptoms just because they seem "too young" to have heart disease. Especially since atherosclerosis can develop in youth and the earlier the problem is identified; the sooner prevention can begin before problems develop.

What causes heart attacks in younger adults?

The increase in death rates among younger Americans may be explained in part by the earlier onset of high blood pressure, diabetes, obesity and other conditions that may lead to heart disease and stroke, according to researcher Pradeep Natarajan, director of preventive cardiology at Massachusetts General Hospital in Boston.

"This may have consequences at those times, but can substantially increase the likelihood of heart disease and stroke in middle age and in the later years," said Natarajan.



In older men, nearly all heart attacks are caused by atherosclerotic blockages in coronary arteries. Conventional coronary artery disease also predominates in young adults, accounting for about 80% of heart attacks. About 60% of these younger patients have disease of just one coronary artery, while older patients are more likely to have disease in two or three arteries.

Staying young at heart

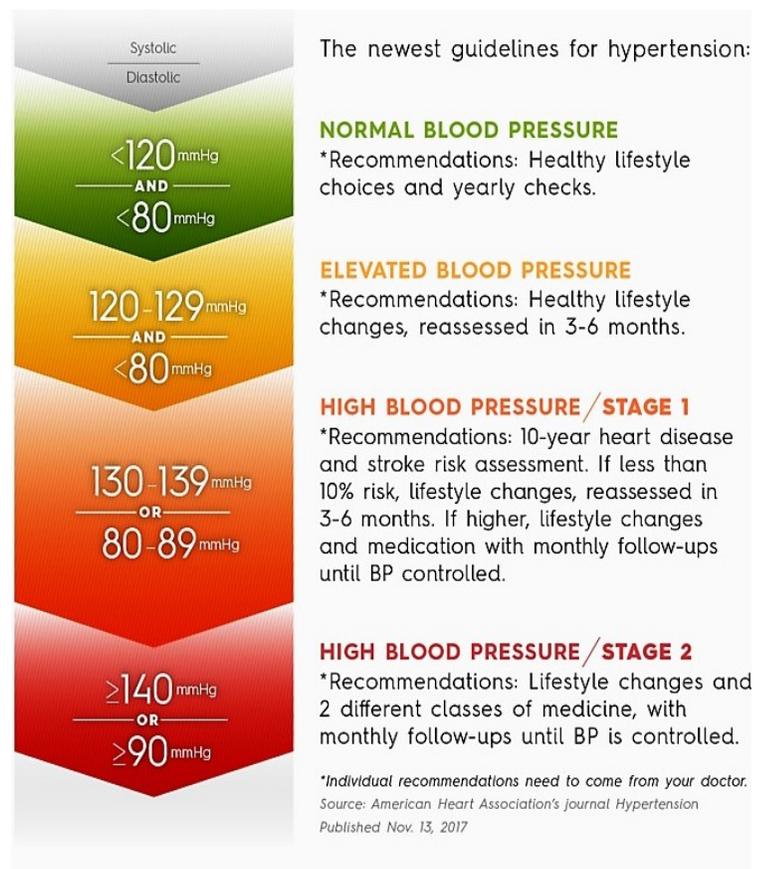
Although atherosclerosis often begins in youth, its clinical impact grows steadily over the years. As a result, a 50-year-old American man has a one-in-two risk of developing heart disease during the rest of his life. That's because cardiac risk factors are present in so many American men.

In a study of 3,564 men, the Framingham Heart Study evaluated the cardiac impact of six major risk factors: high total cholesterol, low HDL ("good") cholesterol, high blood pressure, diabetes, obesity, and smoking. A man who is free of all six has a remarkably low 5% risk of developing cardiovascular disease by age 95. In contrast, the risk for a man with two or more risk factors is 69%. In addition, a risk-free man can expect to enjoy 11 more years of life than a man with two or more risk factors.

Nearly ½ of American adults now at risk from high blood pressure.

According to new scientific guidelines by the American Heart Association redefining the dangerous condition of hypertension, nearly half of American adults now are at risk for major health problems because of high blood pressure. High blood pressure used to be defined as 140/90, but is now lowered to 130/80. The change means 46% of U.S. adults are identified as having high blood pressure, compared with 32% under the previous definition. A blood pressure of less than 120/80 is still normal, but levels at or above that, to 129, will be considered "elevated." Specifically,

- High blood pressure rates could nearly triple among men age 20 to 44 – up to 30% from 11%. Women in that age group will see their rates almost double, to 19% from 10%
- Black and Hispanic men will experience a 17% increase in rates. Asian men will see a 16% increase.



Making young arteries old

Most heart disease in young adults comes from the same risk factors that cause coronary artery disease in older men. The culprits include a family history of heart disease, smoking, high cholesterol, high blood pressure, diabetes, obesity, lack of exercise and elevated levels of C-reactive protein.

The Coronary Artery Risk Development in Young Adults (CARDIA) study put some of these risks into perspective. The researchers evaluated over 5,000 young adults age 18 to 30, then monitored them for up to 15 years to find out how their risk factors influenced coronary artery calcifications, as detected by CT scanning.

- ✓ Smoking 10 cigarettes a day increased the likelihood of CAD by 50%
- ✓ each 30 mg/dL rise in LDL cholesterol increased risk by 50%
- ✓ each 10 mm Hg rise in systolic blood pressure increased risk by 30%
- ✓ each 15 mg/dL rise in blood sugar levels increased risk by 20%.

Unfortunately, risk factors increase in the teen years, particularly in boys. After puberty, insulin resistance and triglycerides rise in males and HDL cholesterol levels fall, while girls enjoy opposite, and protective, changes. Hormones account for some of this, but so do health habits; for example, teenage boys smoke more and eat more fast food than girls, while the amount of exercise they get starts to decrease.

The outlook for young heart attack patients

The short-term outlook for heart attack victims younger than 45 is better than for older patients, perhaps because they often have single-vessel disease and well-preserved heart muscle. But a heart attack is just the tip of the atherosclerosis iceberg, and without dramatic interventions, the disease is likely to progress. In one study of men who had a heart attack at an average age of just 36, 30% were dead within 15 years. In another study of men and women who were stricken before age 40, only 1% died within a year, but 25% died in less than 15 years.



Tools to identify premature heart disease

According to renowned Cardiologist, Dr. Stephen Sinatra, the best heart function tests to assess heart disease risk are EKG, Echocardiogram, Nuclear Stress Test and Holter Monitoring. By implementing mobile Cardiac Testing into your

Primary Care Practice, you can have these tests performed by a certified technician, read by Board Certified Cardiologists and have the results and full report sent back to you in 48-72 hours. Rather than referring out your patients to cardiologists, you can provide *Continuity of Care* for the patient under one roof. The In-Office testing include...

- Electrocardiogram (EKG)
- Echocardiogram (Echo)
- Carotid
- Stress Echocardiogram
- Abdominal Aorta
- Renal Doppler
- Arterial Duplex
- Venous Duplex
- PVR
- ABI
- Exercise PVR

To assure *Continuity of Care*, after you review test results with your patient, other services include:

- Nuclear Stress Testing
- Peripheral Arterial Angioplasty
- Vein Ablation
- Holter monitors
- Event Monitors

Patients' acceptance is high.

Patient's prefer the familiar surroundings and personnel of their trusted Primary Care Provider, and the process is much easier than finding an "in-network" cardiologist to refer them to. Also, patient satisfaction comes from deeper physician engagement. As time with patient is less and specialty testing is demanded by payors, we provide better prevention, higher quality of care and higher-level visits.

Payer acceptance is high.

While payers are demanding better outcomes, practices must be nimble and adapt, becoming more productive, provide increased documentation and create treatment plans that envelope chronic disease management, concurrently with medical interventions.

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