



Angina Symptoms: Treat Chest Pain, Fatigue and Shortness of Breath Seriously

Research shows older women with angina are at a much higher risk for coronary artery disease than men.

If you experience chest pain with physical exertion, whether you're exercising or just climbing the stairs, and the discomfort subsides with rest, you may have stable angina. Unstable angina, on the other hand, refers to chest pain that also occurs when you're at rest. In either case, angina is the pain that results from a decreased flow of blood to the heart muscle. It's usually caused by plaque build-up in the coronary arteries, and it is often a precursor to coronary artery disease (CAD).

A recent study of the connection between angina and CAD revealed some interesting differences between how these conditions affect men and women. The research, published in the July 2010 issue of the *Journal of Internal Medicine*, found that while men were more likely than women to have severe CAD (37 percent compared to 22 percent), women with severe CAD tended to be older than

men (70 years of age compared to 66). But what was most striking was that women with the most serious type of angina, known as Class IV angina, were three times as likely as men with the same condition to develop severe CAD. The risk for CAD for women with Class IV angina was 82 percent, compared to 28 percent for men.

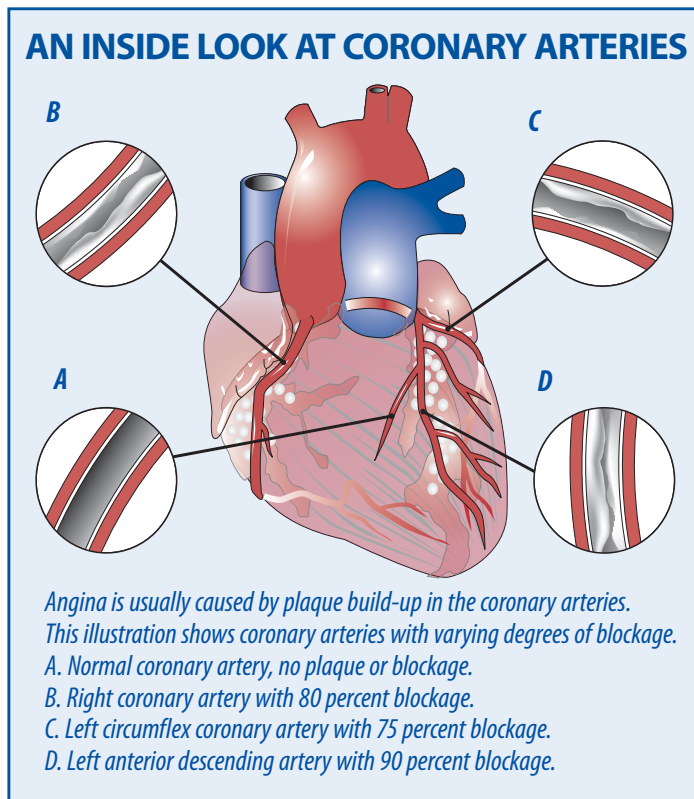
"It is not entirely clear why the risk factors are different between men and women," says Weill Cornell Medical Center cardiologist Erica Jones, MD. "It may have to do with the smaller artery size in women, older age, and hormonal factors; premenopausal women have slightly lower LDL ('bad' cholesterol), and natural estrogens have anti-inflammatory and antioxidant effects, which may improve blood vessel reactivity."

Understanding angina

Dr. Jones notes that not all chest pain is angina. She says that musculoskeletal aches or gastrointestinal complications can cause pain and discomfort in the chest, and these may be mistaken for heart trouble. This makes it difficult to accurately diagnose and rate angina, especially in older adults who may have a variety of medical problems.

This study used the Canadian Cardiovascular Society Angina Classification scale, which ranks angina into five classes:

- ◆ **Class 0:** Asymptomatic
- ◆ **Class 1:** Angina with strenuous exercise
- ◆ **Class 2:** Angina with moderate exertion
- ◆ **Class 3:** Angina with mild exertion (walking 1-2 level blocks at a normal pace; climbing one flight of stairs at a normal pace)
- ◆ **Class 4:** Angina at any level of physical exertion



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“It shouldn’t surprise anyone that class IV angina is a strong predictor of severe CAD,” Dr. Jones says. She adds that once angina is diagnosed, a combination of lifestyle changes and medications often can relieve the symptoms.

“Certainly, keeping an ideal body weight with diet and exercise, and getting the LDL cholesterol very low, will stabilize coronary artery disease and can even reverse some plaque formation,” Dr. Jones says. “This will, of course, decrease angina. Anyone with chest pain that they believe is angina should consult their physician before exercising, though. You need to be sure you do not have unstable disease before embarking on an aggressive exercise regimen.”

Treatment options

Treatment options include medication, stents and surgery. Dr. Jones explains that a variety of medications can help treat the conditions that contribute to angina. For example, beta blockers can help lower blood pressure and heart rate, while nitroglycerin and calcium channel blockers can dilate blood vessels. Aspirin is an established

blood thinner, and statins can help lower cholesterol and possibly reduce plaque build-up on blood vessel walls. “All of these can help ease angina,” she says. “Angioplasty (ballooning the area of blockage) and stents will open the area of blockage to increase blood flow and stop angina, and bypass surgery will reroute the blood around the blockage.”

A study of 65 patients with chronic, stable angina, published in the June 19, 2010 issue of *The Lancet*, found that a common medication used to treat gout also appears to be effective in treating ischemia, a restricted flow of blood to the heart and a contributor to angina. The drug, allopurinol, was well-tolerated by patients and allowed them to exercise longer before signs of angina appeared.

Dr. Jones says allopurinol looks like it may be an attractive anti-anginal medication. “It is not standard of care at this time to use allopurinol for angina, but that may change,” she says. “It does not decrease blood pressure, which also makes it attractive in certain patients. This was a small study, but it is promising. The mecha-

WHAT YOU CAN DO

- **Report chest pains to your doctor, and be ready to offer details about how often the pains occur, what you were doing at the time, how long they lasted, their severity, and what helped them subside (lying down, for example).**
- **Take your statins and other prescribed medications as directed by your physician. If you experience negative side effects, talk with your doctor about alternative medications or lower dosages.**
- **Tell your doctor about symptoms such as fatigue and shortness of breath; these atypical signs of angina are more common in women.**

nism of action is logical, and I will certainly keep it in mind for a patient with debilitating or refractory angina.” 🍊