

Anger: Heartbreaking at any age

Everyone gets angry from time to time. It's a normal human response to unfair treatment and other injustices. But normal anger is one thing, excessive hostility quite another. Some people get angry without provocation, others react excessively to minor adversity, and still others experience inappropriately intense or prolonged anger to legitimate triggers.

Outbursts of anger are never pretty, and they can damage relationships and careers. Anger can also bring on heart disease. Excessive anger at any age can take a toll on men in midlife and beyond.

Research on Hostility

The hostile heart is a vulnerable heart. Harvard researchers have demonstrated that anger has both short- and long-term consequences. In a longitudinal study, scientists evaluated 1,305 men with an average age of 62. Each participant took a psychological test and had detailed medical exams every 3 to 5 years. All in all, the angriest men were three times more likely to develop heart disease than the most placid men. Over the long run, anger can increase a middle-aged man's risk of developing coronary artery disease, but can a single burst of anger trigger a heart attack? Another Harvard study found that it could. Doctors interviewed 1,623 patients about four days after they had suffered a heart attack; 69% were men. The patients used the Anger Onset Scale to rate the intensity of any episodes of anger they had experienced during the 26 hours prior to their attacks, as well as throughout the previous year. Intensive anger was clearly dangerous for the heart, more than doubling the risk of heart attack if the emotion took place in the two hours previous to the heart attack.

Anger in youth

Most research that links anger and heart disease focuses on mature men, but scientists at Johns Hopkins looked to see if anger in young adulthood was associated with heart disease in maturity. The subjects were 1,055 male medical students. Researchers tracked the men for an average of 36 years. Even after risk factors were taken into account, anger in young adulthood emerged as a predictor of premature heart disease. Compared with their peers, the angriest medical students were six times more likely to suffer heart attacks by 55 and three times more likely to develop any form of cardiovascular disease.

Mechanisms

How does hostility harm the heart? Like other forms of stress, anger triggers a surge in *adrenaline*, the stress hormone that boosts the blood pressure and pulse rate, increasing the heart's workload and multiplying its need for oxygen. Adrenaline can also provoke abnormal heart rhythms. In addition, the hormone activates *platelets*, the tiny blood cells that trigger blood clots that can block arteries narrowed by the cholesterol-laden plaques of *atherosclerosis*. High levels of anger can even provoke spasm in a coronary artery, which results in the additional narrowing of a partially blocked blood vessel.

What to do

Harvard researchers recently found that a single aspirin tablet can reduce the likelihood of an anger-induced heart attack by 40%. Aspirin may help, but you can do more. Try to identify the things that bother you most and do your best to change them. Learn to recognize the warning signs of building tension, such as a racing pulse, fast breathing, or a jumpy, restless feeling. When you recognize these signals, take steps to relieve the tension before it builds to the boiling point.

Professional treatment can also help. A 2002 study reported that stress management classes can protect men from stress-induced heart problems, and individual counseling may be even better.

Even without professional help and medication, you can benefit from stress-reducing techniques. Consider learning how to meditate or experiment with deep breathing exercises:

- Breathe in through your nose slowly and deeply, pushing your abdomen out.
- Hold your breath for a few seconds.
- Exhale slowly through your mouth, thinking, "relax."

Repeat the sequence five to 10 times, concentrating on breathing slowly and deeply.. You can also use behavioral techniques to help stay calm:

- Use your car horn only to prevent car accidents, not to vent frustration.
- Talk slowly; try not to interrupt others.
- Don't raise your voice in anger.
- Don't use expletives; substitute less hostile phrases like "darn" or "rats."
- Don't permit outbursts of anger; instead wait for a few moments, take a few deep breaths, and express yourself calmly.
- Try not to grimace or clench your teeth; practice smiling.