

How Psychological Stress Affects the Heart

By : Cosmic Crow

People should be aware of how stress correlates with arrhythmias in the heart, and the preventative measure that can be taken.

Published on
Booksie

[booksie.com/Cosmic Crow](http://booksie.com/Cosmic%20Crow)

Copyright © Cosmic Crow, 2013
Publish your writing on Booksie.com.

How Psychological Stress Affects the Heart

By
Benji Crow
Cosmiccrow@gmail.com

Submitted to Psychology
Research Paper

Teacher: M. Woods

Nov 9, 2004

College of the Redwoods

How Psychological Stress Affects the Heart

Stress can be loosely defined as anything that is experienced as a threat to one's stability or equilibrium. The nervous system activates, to prepare the body to meet the demands of emotional upset. There is a physiological response to stress that results in a heightened mental and physical awareness such as elevated heart rate, faster breathing, and tense muscles. Stress can affect one's heart rhythms also. Late last semester I was diagnosed with arrhythmia called Premature Ventricular Complexes (PVC) due to stress. When the doctor said stress was the cause, I about fell out of my seat. The reason behind my visit was this irregular heartbeat, not to know if I was stressed. I am the last guy on earth I would diagnose with stress. I am mister laid back, without a care in the world. The doctor smiled and said, "That's what most people who have a considerable amount of stress say". She then asked me a series of questions, "Do you have a full time job, are you a full time student, are you going through any emotional stress?" I answered yes to all of those. Then she asked, "Isn't it about finals week at school?" Again I said yes. I know I am a thickheaded man, but it didn't take long before I caught the good doctor's drift. I had no idea how much stress has infiltrated my life, and how much of an affect it has on my body. James L. Nash's article Occupational Hazards demonstrates the research done at Ohio State University concludes that even mild stress can increase the risk factors for developing cardiovascular disease. Dr. Catherine M. Stoney, a professor of psychology at OSU, strongly suspects that psychological stress plays a role in cardiovascular disease. OSU's research has helped me to understand, in part, that arrhythmias also can be affected even by mild stress from work and school. People should be aware of how stress correlates with arrhythmias in the heart, and the preventative measure that can be taken.

Before I explain what the arrhythmias are, first it is important to know how the heart works. The heartbeat usually starts in the sinus node located in the right atrium. The sinus node sends an electrical signal throughout the atria and the atrioventricular (AV) node. The signal then travels down special pathways that conduct it to the ventricles, as the signal travels through the heart, the heart contracts or beats (Bellenir, 299).

The heart is an evolutionary masterpiece, but nature inherently isn't always perfect. Imagine the heart being the exquisitely coordinated drummer of a band. What happens when the drummer misses a beat? The finely tuned band hopes the drummer will continue on the next beat, in stride. Now if the drummer stops altogether, heart attack! These little missed beats in the heart are called Arrhythmias, or some people call them

How Psychological Stress Affects the Heart

heart flutters. There are many types of arrhythmias, depending on where they occur is how they are identified; Atrial fibrillation/flutter, Multifocal atrial tachycardia, paroxysmal supraventricular tachycardia, Wolff-Parkinson-White syndrome, Sinus tachycardia, Sinus bradycardia, Bradycardia associated with heart block, Sick sinus syndrome, and Ectopic heartbeat (A.D.A.M., 2 Nov 2004). When this happens to me it feels like my heart has stopped and has to think what the timing is, like the drummer trying to pick up where he left off. I take a deep breath of air trying to trigger my heart to get back on pace. Sometimes I feel that my heart might stop without my constant attention (fixating). But the doctor told me that fixating on it would only make it worse. She said to try to take my attention off of it when the arrhythmia happens. When I first noticed the heart palpitations my anxiety level would shoot through the roof. Just beneath my ribs my heart felt like a giant rubber band wound so tight, to the point of unraveling. Some arrhythmia-diagnosed people complain of chest pain and trouble breathing. I was having forty or fifty heart flutters a day. The doctor told me arrhythmias aren't fatal, but if I have two in a row that I should go to the emergency room. The information given to a patient varies from one doctor to the next. Other patients have reported that their doctor says not to worry about it until three flutters in a row occurs. Karen Bellenir also reports that, Arrhythmias occur commonly in middle-age adults. As people get older, they are more likely to experience an arrhythmia (Bellenir, 298). So it's very possible that everyone will experience stress related heart flutters at some point in their life. Scary thought? Remember there is nothing to fear, but it's a good idea to check with your doctor. Having an arrhythmia doesn't necessarily mean that the person has heart disease. Research edited by Karen Bellenir states, Many arrhythmias occur in people who do not have underlying heart disease (Bellenir, 297). Anyone could be at risk, and arrhythmias can also be inherited so pay close attention to your family tree. I know that my grandfather was diagnosed with Wolff-Parkinson-White syndrome. There a good chance I am at higher risk of having an arrhythmia or heart disease because of my grandfather's diagnosis.

A.D.A.M.'s reports, Unfortunately, certain arrhythmias can sometimes cause sudden death (bradycardia). Life-threatening arrhythmias include the following: Ventricular fibrillation, and Ventricular tachycardia (A.D.A.M. 2 Nov 2004). All that I know is when one of these arrhythmias occurs, I think of my own mortality and then death factor quickly equates in my head along with adrenalin rush that can follow. The adrenalin plays havoc on my sleep at night cutting into my rest, which the doctor says is needed to recover. Thus adding to my anxiety, stress, and arrhythmias. Anxiety can occur in anyone at any time, and a mild amount can be beneficial. For example, most actors report feeling anxious before a performance (stage fright) but say that this helps them to be alert and on their toes, whether it is the butterflies in the stomach before asking someone out on a date or the rush of anxiety that propels one out the door when one is running late. Often these feelings of anxiety are uncomfortable, uncomfortable enough to make me lose sleep, or make the simple task of going to get on a plane is more like preparing for a war. Be mindful of the way the heart feels, those just might be symptoms of arrhythmias.

There are many different symptoms; Sensation of feeling the heart beat (palpitations), fainting, light-headedness, dizziness, chest pain, shortness of breath, change in the rate, rhythm, or pulse, and temporally absent breathing at one point or another (A.D.A.M. 2 Nov 2004). These experiences can cause anxiety, but for the majority of people, they are completely harmless. My mind keeps telling me that there is something I can do to fix my flutter with out getting medication from my doctor.

Margie Patlak writing shows, A number of factors can prompt a ventricular arrhythmia, including stress, exercise, caffeine, tobacco, alcohol, amphetamines, tricyclic antidepressants drugs, and cough and cold medicines containing pseudoephedrine, as well as several drugs (such as diuretic and digitalis) used to treat various heart conditions (Patlak, 458). That's good to know the next time I get sick and I'm down at the drug store looking for cold medicine. I checked the labels of some of the over the counter meds, and there's not a warning for people with arrhythmias, that's because people with this condition fall under the people with heart conditions warning. In some people arrhythmias are associated with heart disease. In these cases, heart disease, not the arrhythmia, poses the greatest risk to the patient (Bellenir, 298).

How Psychological Stress Affects the Heart

The doctor will listen to your heart with a stethoscope and feel your pulse. This will lead to ECG (Electrocardiogram), then an ambulatory cardiac monitoring system (is used for twenty four hour or up to a month), Echocardiogram, Electrophysiology study (EPS), and Coronary angiography. Many arrhythmias require no treatment. Drugs are carefully chosen because they can cause side effects. In some cases, they can cause arrhythmias or make arrhythmias worse (A.D.A.M. 2 Nov 2004). Karen Bellenir reports that, many arrhythmias require no treatment. Drugs are carefully chosen because they can cause side effects. In some cases, they can cause arrhythmias or make arrhythmias worse (Bellenir, 301). The last thing doctors want to do is give a patient medication that could make the condition worse. I didn't come here to get medicated I came here to get cured. I was hopping for a non-medicated treatment when I presented the fluttering behind my bone cage. I was really hopping she would say spin around three times and through a pinch of salt over my shoulder before slipping into bed. Then I would be cured. She suggested using a beta-blocker, which could slow down the rhythm of my heart. The only problem with that is that my heart rate is already considered slow (60bpm).

For long-term treatment of arrhythmias, daily medication may be necessary. These include antiarrhythmic medications to speed up or slow down the heart rate as I mentioned. There are many treatments, automatic implantable defibrillators, artificial pacemaker, and surgery (Bellenir, 301). If this doesn't sound fun to you, maybe a little preventative measure is in order. Keeping an eye on stress levels and what the body intakes is necessary for a health body and heart.

Everyone should be aware of the affect of stress on the body and heart to better live a healthy life. Also to better deal with stress that inhibits our everyday activities. Anyone who experiences arrhythmias should not panic if one experiences a few flutters or your heart races occasionally.

Prevention includes not smoking, eating a well-balanced, low-fat diet and exercising regularly. If one can pinpoint the problem, then eliminate it, the arrhythmias could eventual go away. For example, if large consumption of alcohol starts the arrhythmias, then the doctor would say stop consuming alcohol in such large quantities. The cure could be as easy as that.

Prevention may also include taking the one thing out of one's life that is use to relax the individual, the thing people run to for comfort maybe the very thing that is causing the arrhythmias in the first place. Stress can be a powerful motivator when reacting to sudden danger or trying to meet a deadline. But more often than not, stress robs us of good health in mind, body and spirit. Sleepless nights are the rule and well-balanced meals a thing of the past. Family time just seems to disappear. Pressures at work overwhelm. Tasks on the to-do list multiply. And worse, an impending sense of doom and depression gnaws at the soul. As the pace of life accelerates at breakneck speed, how and where can you find balance?

In the period of time it took me to write this research paper I would have had one hundred and twenty PVC's. It's kind of a catch twenty-two, the doctor told me not to fixate on my arrhythmias due to the fact that it would make them worse. But knowing is half the battle. Could my heart condition been prevented? I most likely could have prevented my heart flutters with a little stress maintenance.

References

A.D.A.M. Arrhythmias
11 Feb 2003. 2 Nov 2004

Bellenir, Karen. Arrhythmias/Rhythm Disorder. Bellenir 297-05.

Bellenir, Karen, ed Heart Diseases and Disorders SOURCEBOOK. 2ed. USA: Omnigraphis, 2000

Nash, James L. Occupational Hazards.
Cleveland: Sep 1999: Vol. 61, Iss. 9; pg. 30, 1 pgs. Proquest.com

How Psychological Stress Affects the Heart

College of the Redwoods, California. 8 Nov. 2004

Patlak, Margie. â New treatments for Rhythm Disorder.â Bellenir 457-64.

Annotation Bibliography

A.D.A.M. â Arrhythmiasâ

11 Feb 2003. 2 Nov 2004

The authors, research that was put into this web page is accredited by URAC, also known as the American Accreditation healthcare Commissions (www.uran.org). Is a program that requires compliance with 53 standards of quality and accountability, verified by independent audit. A.D.A.M. is among the first to achieve this important distinction for online health information and services. They find that male and female are susceptible to arrhythmias especially in the thirty to forty years of age. The finding also shows the elements that can cause arrhythmias. The test/treatment are still evolving. And that these heart flutters are more common than most think, everyone one at one point or another will experience arrhythmias.

Bellenir, Karen. â Arrhythmias/Rhythm Disorder.â Bellenir 297-05.

See next annotation

Bellenir, Karen, ed Heart Diseases and Disorders SOURCEBOOK. 2ed. USA: Omnigraphis, 2000

Karen edits for the National Heart, lung, and blood Institute (NHLBI). The editor compiled research showed questions and answers about arrhythmias. The list of frequently asked questions helped readers to find info. NHLBI reports that arrhythmias are associated with heart disease. In these cases, heart disease, not the arrhythmia, poses the greatest risk to the patient. The book shows how common the arrhythmias are. It also gives a good description on how the heart works. Book reported many different types of arrhythmias, test and treatments. It also states how to prevent the heart the condition. The book Karen edited shows me that genes are involved with arrhythmias. That it could very well be inherited.

Nash, James L. â Occupational Hazards.â

Cleveland: Sep 1999: Vol. 61, Iss. 9; pg. 30, 1 pgs. Proquest.com

College of the Redwoods, California. 8 Nov. 2004

James reports according to research at the Ohio State University, even mild stress can increase the risk factor for developing cardiovascular disease. Dr. Catherine M. Stoney, a professor of psychology at OSU, strongly suspects that psychological stress plays a role in cardiovascular disease. In his paper there was a study done on 34 women between the ages of 40 and 63, were asked to do two stressful tasks a day. The levels homocysteine were reported high, that could damage arterial walls.

Patlak, Margie. â New treatments for Rhythm Disorder.â Bellenir 457-64.

Margie had written a chapter in this book, Heart Diseases and Disorders SOURCEBOOK. 2ed. USA: Omnigraphis, 2000. She writes about two-time gold medallist skater Sergei Grinkov that shocked the world with her sudden death due to rhythm disorder. There are dangerous arrhythmias, heart quiver instead of beat. This paper seemed to be more linked to heart disease than the arrhythmias themselves. The factors can prompt a ventricular arrhythmia, including stress, exercise, caffeine, tobacco, alcohol, and many other things.

How Psychological Stress Affects the Heart

How Psychological Stress Affects the Heart

Created from Booksie.com

Generated: 2013-05-19 05:55:14