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Arrhythmia

This week, I've talked about the heart cells having properties of both muscles and nerves. It's a very smooth-running system until something interferes with the cardiac-cell function. The result can be an arrhythmia—an irregular heart beat. Some can scare us but won't have any impact on our cardiac health. Others can be fatal. I'll give you a brief overview of arrhythmias and what you can do to prevent them if you don't have one and what you might be able to do about one if you do.

The Causes of Arrhythmias

In short, an arrhythmia is caused by something that will affect the heart's electrical system. It might be something simple such as smoking or excessive alcohol intake or something more complex such as a prior heart attack that leaves scarring in the heart. Anything that can change the heart's cells' structure and ability to beat in rhythm with the rest of the heart can cause an arrhythmia.

Arrhythmias occur more frequently in people with types of heart disease such as hypertension, atherosclerosis, and cardiomyopathy. People with diabetes and thyroid issues are also prone to arrhythmias. One of the most problematic is an inadequate blood flow to the heart; this is what happens during a heart attack. Without enough nutrients, different cells may try to take over as a pacemaker, and that can cause a fatal arrhythmia. When too many different cells want to be the pacemaker, the heart can't stay in rhythm and just stops. Even if you survive the heart attack, the scarring can lead to future arrhythmias.

The Types of Arrhythmias

Ectopic Beats

There are two primary ectopic beats which simply means they occur out of sequence. Premature atrial contractions (PACs) mean the top part of the heart beats out of sequence. Having that type of arrhythmia myself, I know it can be disconcerting because it feels like you're skipping beats. You're not—but the beats are faint and all you feel is a silence like you skipped a beat. It can be very regular.

Premature ventricular contractions (PVCs) mean the lower part of your heart beats out of sequence. Some of these can be so strong that it really feels like your heart might pop out of your chest. Most of the time, they're benign and just happen when you've had too much coffee. When they start happening in twos and threes, that can be a bit more problematic. If you feel these types of beat regularly, time to see your doctor to get it checked out.

Either of these can be scary, but try to understand what's happening and remain calm. The last thing you need is a big jolt of fright-induced adrenaline that will only make you feel more scared, and then you're in a self-perpetuating cycle that can scare the heck out of you and everyone around you, and could even become a serious problem.

Atrial Arrhythmias

Atrial fibrillation is a fast and chaotic beating of the atria, the upper chambers of the heart. The heart can beat very fast—well over 200 beats per minute. Instead of completely emptying the upper chamber of the heart, they flutter—hence the term fibrillation. These episodes can last from a few minutes to a few hours and can be quite scary. Atrial fibrillation can be an ongoing problem and over time, become quite dangerous, leading to more serious conditions such as a stroke.

Atrial flutter is similar to atrial fibrillation. The difference is that in flutter, the heart beats are more organized and more rhythmic. Atrial flutter can be life threatening.

Ventricular Arrhythmias

In this case, the arrhythmia is caused by stimulation from the lower part of the heart—the ventricles—often due to scarring from a prior heart attack. Ventricular tachycardia (VT) can cause the ventricles to contract more than 200 beats a minute. The seriousness of VT is dependent on how long the attack lasts. If it's 30 seconds or less, it's usually harmless. But if it lasts longer, it requires immediate medical attention because it can worsen into a more serious condition called ventricular fibrillation.

Ventricular fibrillation is a life-threatening condition. Instead of pumping blood, your heart just quivers. With no blood pumping, you can see that there are going to be problems. Blood pressure drops, no blood gets to any organs, and you faint. If not treated immediately, it can result in death. Ventricular fibrillation often occurs after a heart attack. Without immediate medical attention, death is the likely result.

If the last paragraph didn't scare you, I don't know what would. But the message isn't about problems, it's about solutions. So what can you do to reduce the risk of an arrhythmia?

Lifestyle to Reduce the Risk of Arrhythmia

Here are the top five actions you can take to help keep your heart beating normally:

1. Never smoke cigarettes, cigars, or pipes; don't chew either. Nicotine is a cardiac irritant and is a leading cause of arrhythmias.
2. Avoid or limit triggers such as excessive caffeine or alcohol intake. Some medications can cause arrhythmias, so talk with your doctor if you start feeling skipped beats, etc.
3. Exercise regularly; it's one of the best things you can do to make sure your heart rhythm is maintained. It doesn't mean you won't ever have an arrhythmia, but it puts the odds in your favor.
4. Manage stress. Whatever works for you to reduce your stress, do it—as long as it doesn't involve large amounts of alcohol.
5. Use omega-3 fatty acids from marine or plant sources: three to five grams of fish or flaxseed oil can help keep the electrical part of the heart working properly. The key here is consistency; take omega-3s every day.

The Bottom Line

Arrhythmias can be frightening and can escalate to life-threatening events. Do what you can do by changing your lifestyle to reduce the risk of getting one, but make no mistake—you need to get everything checked out by your physician. If it turns out it's a serious arrhythmia, medication or even surgery may be required. Sure, we'd all like to avoid that, but you do what you have to do—and then live the best lifestyle you can.

Bonus: For those of you who listen to the message, I've included a story about my experience with Paula's arrhythmia. You don't want to miss it.

What are you prepared to do today?

Dr. Chet

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