

# What can cause dizziness? (Part I)

Dizziness is one of the most common reasons for a visit to the doctor's office. In fact, dizziness though vague in its description, is due to issues dealing with either the cardiovascular or neurological system.

It is important for a medical practitioner to distinguish the different forms of dizziness that can occur. Symptoms that occur from dizziness include a lightheaded or spinning sensation. The term lightheaded sensation, also known as a faint like feeling, is typically a cardiac issue. A spinning sensation commonly referred to as vertigo, is usually related to a neurological concern. Determining the cause of dizziness is vital in treating symptoms effectively.

Dizziness may be related to several different types of cardiac issues. Although mild in some cases, dizziness may perhaps be a warning sign for an impending cardiac arrest.

Patients that experience frequent dizziness may have a condition known as Aortic Stenosis. This condition involves the aortic valve becoming narrowed or constricted. This narrow orifice limits sufficient blood supply to the brain and the heart muscle which may

cause arrhythmias that may lead to dizziness and syncope. As a result, a valve replacement would be a curative treatment.

In a similar fashion, extreme thickening of the cardiac muscle (myocardium) may limit adequate blood flow to the body. This disease is referred to as Hypertrophic Cardiomyopathy. This condition may lead to shortness of breath, palpitations, arrhythmias and eventually lead to dizziness and syncope.

Hypertrophic Cardiomyopathy is usually discovered at a younger age and has become more notable amongst athletes such as basketball player Reggie Lewis. Once discovered, family members should also be screened and treated appropriately.

Another condition that usually involves the younger population is a rare cardiac condition known as Postural Orthostatic Tachycardia Syndrome (POTS). Patients that experience POTS have a sudden increase in heart rate when changing from a sitting to standing position. Patients may become fatigued, dizzy and eventually experience syncope.

Treatment of this condition may be challenging. The combination of lifestyle mod-

## THE HEART BEAT

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ifications, the use of medications and increasing fluid intake can be helpful.

In elderly, the conduction system may become indolent. The heart rate may decrease and bradycardia may develop. In other instances, short pauses may occur in heart rhythm, called sick sinus syndrome and normal stepwise conduction is disturbed. In these situations, a pacemaker may be needed to generate heart beat if the heart rate drops too much or pauses occur. Offending medications and certain diseases such as thyroid disease must be ruled out in these situations as well.

Other rhythm abnormalities exist that are potentially life threatening and may lead to cardiac arrest and death. People who are prone to these rhythms are either having genetic predisposition or more commonly have structural heart

disease; they may have Congestive Heart Failure with severely reduced pump function of the heart or have significant coronary artery disease. Such patients' dizziness is sudden in onset and maybe brief.

In appropriately selected group of patients Implantable Cardioverter Defibrillator (AICD) is implanted. AICD is a device the size of a pager which is placed under the skin in chest with leads in the heart. It's simply an emergency room in the chest; it shocks the heart in face of lethal rhythm or cardiac arrest to revive the patient's heart back to normal rhythm.

Dizziness has many causes and its appropriate diagnosis and treatments are important. Look for next month's column as I will continue the remaining discussion on this topic.