



*Setting the Standard in Cardiac & Vascular Care*

## **SYNCOPE and PRE-SYNCOPE (Fainting and Lightheadedness)**

### **■ WHAT IS SYNCOPE?**

Syncope, otherwise known as fainting, is a brief, sudden loss of consciousness. Prior to syncope you may experience dizziness, nausea, palpitations, cold sweats, shortness of breath or chest discomfort. Usually, consciousness returns in a matter of seconds or minutes. Fainting is fairly common and usually isn't caused by a serious or life-threatening problem.

### **■ WHY DOES SYNCOPE OCCUR?**

Syncope occurs for many different reasons. Non-cardiac reasons for fainting include:

- Anxiety or emotional upset - this is one of the most common and least worrisome causes
- Dehydration - this occurs more often after illness or physical exertion, particularly in hot sun
- Orthostatic hypotension - as people age, the nervous system's ability to control blood pressure becomes less sensitive. Rising from a lying to a standing position may cause fainting because the blood pressure in the your brain is momentarily lower than is needed
- Low blood sugar or "hypoglycemia"
- Medications - some medications can lower blood pressure to a pint that is too low for what is required by your brain

Cardiovascular causes of syncope include:

- Irregular heart rhythms - the most common heart-related cause of fainting. The heart may beat so rapidly that too little blood gets to the brain. Or, a very slow heart rate caused by heart block or pacemaker failure may cause fainting.
- Aortic stenosis – an abnormal thickening of one of the heart's valve can cause temporary decreases in blood pressure that lead to fainting
- Neurocardiogenic or Vasovagal Syncope - this happens when the vagus nerve causes the heart rate to slow, causing your blood pressure to decrease temporarily. Vasovagal syncope commonly happens when you hold your breath and strain, such as during urination or a bowel movement or from coughing hard or long.

### **■ HOW IS THE CAUSE OF SYNCOPE DIAGNOSED?**

If you have been referred to a cardiologist because of fainting, your fainting may be heart-related. Your doctor will ask about your medical history, particularly about the times you have fainted. How you felt before and after you fainted are important facts that can help in making the diagnosis. Your doctor will ask about the medicines you take and will examine you. Depending on your age and health history, your doctor may want to do some tests, including:

- An electrocardiogram (ECG) - records the electrical impulses from your heart.
- Holter or event recorder - used to make a recording of your heart rhythm over a day or several weeks.
- Echocardiogram - an ultrasound test of your heart that gives information about the heart's structure and function
- Stress test - gives information about the heart rhythm and the blood flow to the heart
- Chest x-ray
- Tilt table test - helps to diagnose neurocardiogenic syncope
- Electrophysiologic Study (EPS)- tests the electrical system of the heart and used when the cause of fainting is related to the electrical conduction system in the heart