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MATTERS OF THE HEART

For more than one reason, the final day of this year's Solheim Cup is one the LPGA's Meg Mallon will always remember. First, when she sank a crucial putt in a dramatic match against Europe's Karen Stupples, it clinched the cup for the women of the United States. But that's not all.

Even more significantly, a bit later the same day, she experienced a rather terrifying episode. Just a few hours after the closing ceremonies, Mallon suddenly felt her heart racing out of control and could not catch her breath. Paramedics were immediately called by her teammates and she was rushed to an Indianapolis hospital.

Amazingly, just *four days* later, another world-class golfer, 2001 PGA Championship winner David Toms, was mid-way through his opening round of the PGA Tour's 84 Lumber Classic in Farmington, Pennsylvania. Just after complaining about three putts on the previous green, he suddenly clutched his chest, complaining he couldn't breathe, and fell to one knee. Shaun Micheel, his playing partner, said that his face became "ashen-white." Paramedics quickly transported Toms from the golf course to a local hospital. Soon after, he was air-lifted to another, larger medical center in Pittsburgh for further evaluation and treatment of the problem.

As alarming and coincidental as these stories sound, they both fortunately have happy endings. Mallon was able to play in an LPGA event just two weeks later, and Toms competed in the Presidents Cup the *following week!* And, both were actually afflicted with the very same medical disorder, a heart problem known as *paroxysmal supraventricular tachycardia*, or "PSVT."

First, a quick anatomy review. The heart is made up of four chambers. The two *atria*, which are the smaller of the chambers, sit above the two larger *ventricles*. Normally, the electrical impulses which cause the heart to beat are well synchronized and conducted from the atria down to the ventricles along a single electrical pathway. People with PSVT very commonly have an *extra* electrical pathway. If the electrical charge travels down the normal pathway faster, and than travels *up* the "accessory" pathway, the electrical current can start repeatedly going around in a loop and the heart can end up beating very fast, with heart rates often well above 150 beats per minute (and up to 250), with normal being between 60 and 100. PSVT starts above the ventricles ("supraventricular"), usually in the atria, "tachycardia" simply refers to any accelerated heart rate, and "paroxysmal" means that it comes and goes with no definite pattern.

Occurring at any age and in either gender, PSVT is more common in younger adults in their 20's to 30's and also has more of a propensity toward women. Although the symptoms can be quite frightening, it is rarely life-threatening. Patients with PSVT may just intermittently feel mild palpitations (rapid and/or strong heart beats) or can experience much more dramatic symptoms, as did Toms and Mallon. These include chest pain or tightness, shortness of breath, weakness, dizziness, lightheadedness, and anxiety with "feelings of impending doom." It can

even cause people to faint. The symptoms can occur seldom or frequently and start and stop rather suddenly, lasting just a few minutes or up to several hours.

Due to the sporadic nature of PSVT, it can sometimes be a challenge to diagnose. If an EKG is not available and done at the time symptoms are occurring, a person may need to wear either a *24-hour holter monitor* or a *loop recorder*, two different methods of continuous ambulatory monitoring, to "catch it in the act." You may need some blood tests checked, including your *thyroid* function. If needed, there is also a special study available, performed by a specially trained cardiologist, called an *electrophysiologic study* (EPS). This test examines the electrical pathways in your heart and can locate the source of many abnormal heart rhythms.

If PSVT occurs infrequently and the symptoms are mild, it may not require any treatment. If the symptoms are frequent and/or severe, treatment is usually recommended. Of the two most common options, one is to take daily medications, which is the option David Toms initially chose because he wanted desperately to compete in the Presidents Cup the following week. He was prescribed a drug called a *beta-blocker*, which slows the heart rate and decreases the heart's tendency to convert into PSVT.

Another option is *radiofrequency catheter ablation*, which uses high frequency radio waves delivered through a wire placed inside the heart to interrupt the abnormal pathway. This relatively simple and low risk procedure is generally curative and often the preferred treatment. This was the option chosen immediately by Mallon, and eventually also by Toms.

While it's certainly not guaranteed to prevent PSVT, the best thing to do is to lead a "heart-healthy" lifestyle:

- Maintain a healthy weight and eat a healthy diet
- Get regular exercise – talk with your doctor about a "healthy" amount for you
- Quit smoking (don't you get tired of this one?)
- Limit the amount of caffeine and alcohol in your diet
- Cut down on stress (now that's easier said than done!)

If you have known PSVT, there are simple maneuvers your doctor can talk with you about to attempt to terminate an episode. If the episode does not stop on its own, these maneuvers are not successful, and/or if you have new or unusual symptoms, then see your health care provider at once.

Both Toms and Mallon had experienced symptoms previously, though much milder. In fact, Mallon, diagnosed with *panic attacks* in her mid-teens, may have quite possibly been instead having episodes of PSVT. Toms feels relieved to know now what has been causing his symptoms, and Mallon feels as if she "has a new lease on life" after undergoing the radiofrequency catheter ablation treatment.

Remember; always take "matters of the heart" very seriously.

