Combating Cardiac Arrhythmia

Electrophysiology provides life-saving treatments for Baylor patients suffering from irregular heartbeats

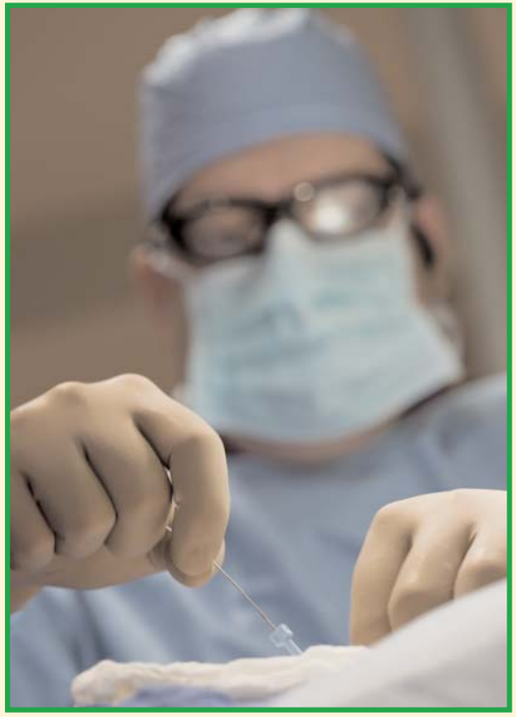
Almost everyone at some time has experienced a rapid heartbeat or an occasional flutter of the chest. For many, there is no cause for concern. These arrhythmias, or irregular heartbeats, are often harmless. For a growing number of Americans, however, persistent arrhythmias can have life-threatening consequences.

"Many people think they just have to live with the problem," says Michael Sanborn, vice president of cardiac services for Baylor Health Care System. But Baylor is using the latest technologies available, with highly-trained cardiology specialists called clinical cardiac electrophysiologists to offer specialty treatment.

Electrophysiology, a subspecialty of cardiology, is a relatively new area of study, requiring an additional one to two years of training to become certified. Only 2,300 physicians nation-wide specialize in this field and 16 are affiliated with Baylor.

"We offer specialty treatment for electrical heart problems, like irregular heart rhythms or hearts beating too fast or too slow," says Kevin Wheelan, MD, medical director for the Baylor Jack and Jane Hamilton Heart and Vascular Hospital. "Essentially, we are the electricians in cardiology."

Arrhythmias can develop at any age, says Dr. Wheelan. Some people are born with irregular heartbeats and others develop a short circuit over time, usually as they age.



Brian DeVille, MD, medical director for THE HEART HOSPITAL Baylor Plano, says arrhythmias often go undiagnosed and untreated. Raising awareness among patients and primary care physicians to the symptoms and risk factors for developing arrhythmias is crucial to prevent life-threatening conditions, including stroke or cardiac arrest, says Dr. DeVille.

Although medication is often an effective treatment, some patients require more invasive forms of treatment, which is where electrophysiologists come in. Treatments include device implantation, such as a pacemaker or defibrillator to enable the heart to beat regularly, or cardiac ablation, where the electrophysiologist guides a small, wire catheter to the problem site and uses radiofrequency energy to make the heart beat regularly.

"These procedures can eliminate medication use that is either not working or is causing negative side effects," says Dr. Wheelan. "There are also life-saving benefits, and many patients have an improved quality of life."

Baylor has also implemented the latest technology by Sterotaxis, to help combat cardiac arrhythmias in four of its facilities. THE HEART HOSPITAL Baylor Plano, Baylor Jack and Jane Hamilton Heart and Vascular Hospital, Baylor Medical Center at Irving and Baylor All Saints Medical Center at Fort Worth are each equipped to utilize the technology that relies on magnetic energy to guide wire catheters to problem sites in the heart. "The great benefit to the patient is the precision this new technology offers," says Sanborn. Baylor is currently considering other facilities for implementation.

Above: Brian DeVille, MD, medical director for THE HEART HOSPITAL Baylor Plano, inserts a wire catheter to the problem site in preparation for using the Stereotaxis machine.

February is American Heart Month

American Heart Association. Learn and Live.

American Heart Month raises funds for heart research and education and awareness about heart disease and stroke. Cardiovascular diseases, including stroke, are our nation's No. 1 killer. Today, there are approximately 4.3 million Americans living with arrhythmias and more than 250,000 who suffer sudden cardiac deaths each year.

When Should I see My Doctor?

If you develop any of these persistent symptoms, you should make an appointment with your physician.

- **Fatigue**
- **Dizziness**
- **Lightheadedness**
- **Fainting or near-fainting spells**
- **Rapid heartbeat**
- **Shortness of breath**
- **Chest pain**

Risk Factors for an Irregular Heartbeat

- **Age**
- **High blood pressure**
- **Congestive heart failure**
- **Diabetes**
- **Previous heart attacks**
- **Past heart surgeries**
- **Heart valve problems**
- **Sleep apnea**
- **Excessive alcohol use**
- **Overactive or underactive thyroid gland**
- **Obesity**