

October 31, 2011

Follow AHS_Media on Twitter 

Libin team treats heart rhythm problems in more patients

Advances in technology allows more high-risk patients to safely undergo procedure

CALGARY – Doctors at the Libin Cardiovascular Institute are now able to treat irregular heart rhythms in a wider range of patients than ever before, including individuals with complex health conditions who previously had few treatment options.

Pregnant women and patients with severe heart failure are among the patients now able to undergo cardiac ablation, a procedure in which doctors use heat to destroy the tissue in the heart that causes irregular heartbeats.

“Recent advances and new technology in our lab has made these procedures possible for more patients within Alberta Health Services (AHS),” says Libin electrophysiologist Dr. Yorgo Veenhuyzen. “We can now tackle complicated, sick patients who would not have been taken to the electrophysiology lab five years ago.”

Previously, cardiac ablation was considered too risky for many patients with complex health conditions. However, thanks to Libin’s state-of-the-art electrophysiology lab at the Foothills Medical Centre, doctors have recently performed ablations on a pregnant woman, and another patient who was waiting for a heart transplant and on a Ventricular Assist Device (VAD), which helps pump blood. These cardiac ablation procedures were among the first of their kind in Western Canada.

Although most arrhythmias are not fatal, about 45,000 Canadians each year die suddenly from serious heart rhythm problems. The condition can be treated using medications and a defibrillator machine. When this treatment options fails, ablation can be a reliable treatment option.

Doctors insert small tubes into veins at the groin, which travel up to the patient’s heart. Electrodes at the ends of the tubes record signals to help doctors to map the patient’s heart. Doctors then cauterize the specific points in the heart triggering the abnormal heart rhythm. The entire procedure can take several hours.

Ablation is often a more reliable treatment option than the use of medication and defibrillators, which can be painful for patients. About 400 southern Albertans undergo ablation annually.

Late last year, Dr. Veenhuyzen performed an ablation on 33-year-old Tanya Dunphy, an expectant mother experiencing rapid heart rhythms.

“Her weakened and racing heart raised concerns about blood flow to the child,” Dr. Veenhuyzen explains. “Medications were not working. Previously, we wouldn’t perform a normal ablation procedure because it would mean exposing the developing baby to the potentially toxic effects of X-rays.”

Follow AHS_Media on Twitter 

Instead of using an X-ray camera to locate the part of the heart causing the arrhythmia, Dr. Veehnuyzen used a 3-D anatomical mapping system. In a procedure lasting less than three hours, Dunphy was cured of her arrhythmia and her heart began regaining its normal strength. A few weeks later, she delivered a healthy baby boy.

“The procedure saved both of our lives,” Dunphy says. “I’m so grateful for the team at Foothills – I’m healthy and so is my baby, Jacob.”

Dr. Todd Anderson, Libin’s Director and AHS Department Head of Cardiac Sciences, says recent advancements mean ablation is now an option for more patients.

“We can now help a group of patients who before were too sick to be managed. This has significantly improved the outcomes of these patients,” Dr. Anderson says.

The Libin Cardiovascular Institute of Alberta provides superb education and training of health care professionals, world-class treatment, using state-of-the-art technology, increased access to cardiac services through innovative use of technologies such as Telehealth, research programs in cardiovascular basic science, biomedical engineering, clinical science, population health research, and the relationships among them. For over 30 years the institute has been at the forefront of cardiac electrophysiology research, education and care delivery. The envelope of medical science knowledge has been expanded by responding to the gap between basic biomedical science and health care innovation by reinforcing translational science including the execution of clinical trials. For more information, visit www.LibinInstitute.org.

Alberta Health Services is the provincial health authority responsible for planning and delivering health supports and services for more than 3.7 million adults and children living in Alberta. Its mission is to provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.

- 30 -

For media inquiries, contact:

Colin Zak
AHS Communications
587-893-0256