

## Southlake marks ?pioneering? cardiac milestone with 4D tech



Southlake Health is the Region's go-to cardiac centre and, last week, celebrated a new milestone in providing leading-edge care close to home.

The local hospital is now just the second hospital in Ontario ? and the fourth nation-wide ? to use 4D technology to image the heart in some of its most complex cases.

As it's a technology not approved for regular use within Canada, Southlake received ?Special Access? authorization to bring the use of Nuvision 4D ICE catheters to fruition.

?Typically, physicians who require a 3D image of the heart use transesophageal echocardiograms (TEE), a procedure during which a thin tube is guided down the esophagus to take pictures of the heart,? says Southlake. "The Nuvision 4D ICE catheter is next generation technology. A small catheter with an ultrasound sensor is inserted from the leg into the heart to generate real-time images of the valves and other structures. This advanced technology provides higher quality, real-time images, allowing physicians to instantly see the heart in 3D so that patients who cannot use TEE can still undergo life-changing cardiac procedures that help them avoid recurrent heart failure and other complications.?"

Southlake began the work to bring the 4D tech to Newmarket after receiving a cardiac referral from a patient in Windsor, ON.

The patient in question, Nancy Skinner, was ?seeking treatment for tricuspid valve regurgitation (TVR), a form of heart valve disease in which the valve between the two right chambers of the heart does not fully close.? Moderate to severe cases of the condition can require surgical valve repair or replacement, to ensure optimum blood flow to the heart.

?However, Nancy was not a candidate for surgery and complications with her heart valve prevented clear imaging of the valve with TEE. This imaging is necessary to ensure a safe and successful procedure, and patients who cannot have TEE or have inadequate imaging with the tool are ineligible for procedures like a transcatheter tricuspid valve repair, leaving them with limited care options. Nancy and her cardiologist needed more options to address her heart disease. Undeterred, [Dr. Warren Cantor], an international expert in acute coronary syndromes, and the cardiac team at Southlake turned to global solutions in the Nuvision 4D ICE catheter.?"

Cantor says when a patient comes to Southlake with matters of the heart, ?they're trusting us with their hearts, a responsibility that our team takes incredibly seriously.?"

?Special access to cutting-edge technology like the 4D ICE catheter enables us to offer treatment options to patients who otherwise

have little to no options, improving their quality of life,? says Cantor. ?We are honoured to play a key role in bringing this technology to Southlake and Canada.?

Adds Derek McNally, Executive Vice President of Clinical Services for Southlake Health, and Chief Operating Officer: ?Over the last century, Southlake Health has built a proud legacy of leading-edge care, close to home to save patients from travelling into Toronto. Our world-class team at the Regional Cardiac Centre continues to lead ground-breaking research and techniques, ensuring patients from York Region to Muskoka, and beyond have access to the best care possible.?

And Nancy is a testament to this.

?I feel like myself again,? says Nancy. ?Dr. Cantor and the cardiac team at Southlake Health gave me another chance at life and went above and beyond to do so. I am so thankful for their resourcefulness in getting this new technology.?

**By Brock Weir**