

A North American first at the Montreal Heart Institute

The surgical team at the Montreal Heart Institute (MHI) achieved a North American surgical milestone on May 1st with a sutureless aortic valve replacement through a thoracic incision just five centimetres long. The two patients in their seventies who underwent this innovative procedure, which was performed by cardiac surgeons Denis Bouchard and Michel Carrier, were doing well only one week after their operations.

A novel combination

"This innovative combination of implanting a Perceval™ S valve through a minimally invasive thoracotomy signals great progress for Quebec's aging population, as 3% of Quebecers aged 75 and over suffer from severe aortic stenosis," stated Dr. Bouchard.

The sutureless valve opens like an umbrella and attaches to the walls of the aorta thanks to its elastic self-anchoring frame. No sutures are necessary, which decreases the risk of complications. Since the valve is inserted through a thoracic opening that is barely five centimetres long and is implanted without sutures, the surgery only takes one and a half hours, or twice as less time than a conventional open-heart procedure.

Patients regain mobility faster

One of the patients who received the surgery, Madeleine Lacombe, a very active 79-year-old grandmother who is an avid golfer, had suffered from swelling and shortness of breath for a number of months. Diagnosed with severe aortic stenosis, she was worried about open-heart surgery, which would require a long recovery period and make her miss out on enjoying the summer.

"I never thought I would get back on my feet so quickly!" she said a week after her quick procedure, relieved to be in such good form. "But I may have to forgo my tee times this year, as I can't find other 80-year-old women who can match my golf game!" She is happy to be going back home to her apartment in Saint-Hyacinthe at the end of May.

With both of his patients in good health, Dr. Bouchard is confident they will fully resume their normal lives within no more than a month of the surgery. "Not only will vulnerable patients such as Ms. Lacombe be at a lower risk of post-operative complications, they will also regain mobility three times faster with this new procedure," he explained.

With the success of both of these surgeries, the MHI is planning to perform 30 similar procedures in the coming year on elderly patients with higher surgical risks.

A North American first at the Montreal Heart Institute

Published on Medical Design Technology (<http://www.mdtmag.com>)

Overall, more than 1600 cardiac procedures were performed in 2010-2011 at the MHI's surgical department.

Source URL (retrieved on 03/09/2014 - 11:34pm):

http://www.mdtmag.com/news/2012/05/north-american-first-montreal-heart-institute?qt-most_popular=0