IJN Introduces NavitorTM TAVI Procedure

Breakthrough treatment for aortic stenosis

In a remarkable leap forward in the field of cardiovascular medicine, Institut Jantung Negara (IJN) unveiled a groundbreaking medical procedure that has the potential to revolutionize the treatment of aortic stenosis. This innovative procedure introduces the Navitor™ transcatheter aortic valve implantation (TAVI) device, which significantly advances addressing aortic stenosis, a debilitating heart condition.

The Navitor™ TAVI: Redefining Treatment

Aortic stenosis is a condition characterised by the narrowing of the heart's aortic valve and this, in turn, restricts the blood flow from the heart to the rest of the body. Aortic stenosis poses serious symptoms such as chest pain, rapid heartbeat, and shortness of breath. If left untreated, this condition can be life-threatening and lead to heart failure.

The conventional treatment for severe cases was surgical valve replacement. However, not all patients are suitable candidates for open-heart surgery, particularly the elderly and those with comorbidities such as diabetes and liver disease. Recognising this challenge, IJN has pioneered the Navitor™ TAVI procedure, a

minimally-invasive alternative that offers swifter recovery rates and reduced pain. The process entails the introduction of a substitute valve through a catheter,

which is guided through a small incision in the femoral artery.

The Navitor enhances TAVI with its distinctive design, focusing on improved accuracy and better patient results. Developed by global medical company Abbott, the Navitor™ TAVI device represents a significant stride in transcatheter aortic valve implantation. Unlike its predecessors, Navitor™ incorporates cutting-edge features designed to mitigate blood leakages around the valve implant, a common complication in TAVI procedures.



The apparatus incorporates a fabric cuff that diminishes or eradicates the reverse flow of blood around the valve framework—an issue frequently encountered in TAVI procedures. Beyond its role in promoting optimal blood circulation via the aortic valve, this device stands out as the singular self-expanding TAVI system featuring leaflets positioned within the native valve. This configuration not only ensures exceptional blood flow but also simplifies surgeons' access to an individual's coronary arteries for subsequent treatments.

IJN's Triumph: A Beacon of Progress

On May 12th, two patients had the Navitor TAVI procedure at IJN. This makes IJN the first in Malaysia to successfully do this advanced treatment. This success adds to IJN's TAVI capabilities, following its achievement as the first in Asia to introduce TAVI in 2009, which since then a total of 160 patients has benefitted from the procedure to date. This achievement is not only a testament to IJN's expertise but also a ray of hope for aortic stenosis patients who previously faced limited options.

"These design improvements go a long way in helping us treat aortic stenosis more efficiently and accurately, with better long-term outcomes," said IJN's Senior Consultant Cardiologist, Datuk Dr Shaiful Azmi Yahaya. "Current research indicates that this design features minimal patient-prosthesis mismatch, where the prosthesis is too small for the patient, and enables us to better manage any future medical interventions the patients may need."



We're committed to continue pushing the boundaries of medical innovation and offer a renewed sense of hope and healing for those in need.

A Glimpse into the Future

As IJN forges ahead with its transformative NavitorTM TAVI procedure, IJN's Chief Executive Officer, Datuk Dr Aizai Azan Abdul Rahim expressed that IJN remains steadfast in its commitment to pushing the boundaries of medical innovation.

"We're committed to continue pushing the boundaries of medical innovation and offer a renewed sense of hope and healing for those in need. I'd also like to thank our medical team for their unwavering dedication to realising this mission, and keeping us at the forefront of cardiovascular care," said Datuk Dr Aizai Azan Abdul Rahim.

Institut Jantung Negara's introduction of the Navitor™ transcatheter aortic valve implantation (TAVI) procedure marks a significant moment in the field of cardiovascular medicine. By bridging the gap between conventional surgical interventions and minimally-invasive alternatives, IJN has paved the way for enhanced patient outcomes, reduced discomfort, and a brighter future for individuals battling aortic stenosis. ❖

