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# IJN can now replace heart valves without open heart surgery

By YUEN MEIKENG

**KUALA LUMPUR:** The National Heart Institute (IJN) achieved another milestone by performing the first heart valve implant in Asia without the need for open surgery.

Known as transcatheter aortic valve implantation (Tavi), the procedure allowed problematic valves in the aorta to be replaced with an artificial one by using a tube that is 6mm in diameter known as a catheter.

The tube is inserted either at the thigh area or below the left collar bone and then slid through arteries to the heart.

And the procedure has a 99% success rate.

“Patients, who have gone through Tavi, will be able to move around on the third day after the implant but they would be required to lie down during the first 24 hours,” said IJN medical director Datuk Seri Dr Robaayah Zambahari.

She was speaking to a press conference to announce the achievement at IJN here Friday.

The procedure, which uses a device called CoreValve, causes less trauma to body tissues and enables a faster recovery compared to the conventional open heart surgery as only incisions are made at certain areas to insert the tube.

Dr Robaayah was part of the team of IJN consultants that performed the procedure on the first patient, a 73-year-old man who suffered from severe narrowing of heart valves and a second patient, a 77-year-old man on November 25.

The third patient was National Laureate Datuk Shahnnon Ahmad, 76 who was treated the next day.

The team included cardiologists Datuk Dr Rosli Mohd Ali, Dr Shaiful Azmi and cardiothoracic surgeons Datuk Dr Mohd Azhari Yakub, Dr Jeswant Dillon as well as anaesthesiologists Datuk Dr Mohamed Hassan Ariff and Dr Sharifah Suraya.

The procedure was assisted by Dr Ganesh Manoharan, a consultant interventional cardiologist from Ireland, who will also overlook the operations of the next 12 to 15 patients.

“The 12 to 15 patients are currently on the waiting list to be certified by IJN and the costs of their operation will be borne by IJN.

“After that, patients need to know that the CoreValve device will be RM112,000 while another RM10,000 will be needed for other operation costs,” she said, adding that she hoped the Health Ministry would offer support and subsidise the procedures for the public in future.

Dr Robaayah said there has yet to be any case of a patient’s body rejecting the artificial valve made out of a type of metal

called Nitinol.

“The procedure takes an average time of 45 minutes to one and a half hours. We took about two and a half hours for the first patient because we were still learning about the procedure and wanted to be careful,” she said, adding that the method was only performed on high-risk patients such as the elderly, so far.

Dr Ganesh said local anaesthesia was used on the patients so that they remained awake during the procedure but did not feel any pain.

“It is not surprising to see patients smiling as we conduct the procedure on them,” he said.

“About 50 centres worldwide are applying this technology but it is more suitable for this region since Asian blood vessels are generally smaller,” Dr Ganesh added.