Fortis Malar Hospital, Chennai :

The Times of India, December 12, 2014, Edition: Chennai; Reporter: Bureau, Total Area: 166.31 sq cm; Page: 2

Engineers, docs to discuss matters of heart

TIMES NEWS NETWORK

Chennai: In a first-of-a-kind initiative, engineers and clinicians will come together on a common platform during a two-day meet in the city to brainstorm on the future of cardiac surgery and ways in which heart treatment can be refined.

Lack of patronage for research and lacunae in the education system has hindered the application of engineering skills to treatment of people with heart disease, experts said at a meeting organised to announce the conference in the city on Thursday.

"In the West, most doctors don't stop at just studying medicine. Many pursue PhDs in other specialised streams of science like infection control and transplantation," said Dr Keshava Rajagopal, a cardiothoracic surgeon who specialises in end-stage heart and lung disease. "In the process they are beginning to realise that doctors cannot heal with medical knowledge alone, but also need engineering skills."

Dr Rajagopal is also a doctor who uses knowledge and skills gained from exposure to multiple fields. He received advanced training in heart and lung transplantation and the use of mechanical support for both organs. In India, with the lack of a flexible system of education that allows a person to pursue varied courses, cardiologists depend on engineers, especially with an increase in need for artificial heart and lung support devices, Dr Rajagopal said.

Bringing engineers and cardiologists on a common platform could help forge closer links between both the fields, said Dr Bartley P Griffith, professor of surgery and head of the division of cardiac surgery at Heart and Lung Transplantation University of Maryland School of Medicine, who will be one of the speakers at the event.

The event is being organised by Fortis Malar Hospital, dept of engineering design, IIT-Madras, and Indian Society of Artificial Thoracic Organs.

KEEPING THE BEAT

The sharp spiral in the number of heart failures has increased the need for mechanical devices

Pacemakers | If heart rate is irregular, a pacemaker that sends electrical impulses to heart muscles to maintain heart rate is implanted. This is also used to treat fainting spells, heart failure and hypertrophic cardiomyopathy

Implantable Cardioverter Defibrillators | This implanted device helps maintain a normal heart beat. It contains a sensor which monitors heart's rhythm and a pulse generator which delivers energy to the heart when it detects an abnormal heart rhythm

Ventricular Assist Device | It is a kind of mechanical heart, kept inside the chest. It helps the heart pump oxygen-rich blood throughout the body

Enhanced External Counterpulsation | Used to treat persistant chest pain and helps stimulate blood vessels to develop small branches bypassing a blocked artery