

## **Rare Heart Surgery Performed in Yenepoya Medical College Hospital.**

The cardiac surgical team of Yenepoya Medical College Hospital(YMCH) Mangaluru recently performed successfully a difficult heart surgery on a patient with a rare congenital heart defect called Ebstein's anomaly of tricuspid valve.

Ebstein's anomaly is a rare congenital heart disease (CHD) with malformation of the tricuspid valve and dysfunction of the right ventricle. This condition occurs in 0.5 % of all congenital heart disease. The leaflets of the (Right side heart) tricuspid valve fail to develop properly and are adherent to the inner wall of the heart chamber. This leads to leakage of blood through the valve and right ventricle failure to pump blood to lungs properly. This anomaly has 4 types based on tricuspid valve failure of delamination and functional right ventricle. Type 1 and 2 can be managed with complete correction 2 ventricle repair easily. Type 3 is border line for 2 ventricle repair. Type 4 goes for single ventricle procedure or transplant. Surgical repair of the valve is the preferable treatment option. Other procedure are changing the valve with tissue valve or metal valve which have higher complications than repair. Some time procedure are done to bypass the right ventricle partially (bi directional glenn) or fully (Fontan). Last option is heart transplant or ventricle assist device.

A 36 years old lady hailing from Chitradurga was diagnosed with Ebstein's anomaly and was referred to Yenepoya Medical College Hospital. After thorough evaluation of the patient, 'cone repair of the tricuspid valve' was performed by the cardiac surgical team (Dr.Sakthivel, Dr.Ganesh Kamath, Dr.Arjun, Dr.Nilesh, Dr.Mohandas, Dr.Krishnaprasad and Dr.Vinayak). There are very few centers in Karnataka where this operation is performed and Yenepoya cardiac center is one among them. Delamination (Seperation) of the leaflet from right ventricle which is thin due to dilation is a difficult process and is easy to damage the leaflet or perforate the ventricle with bad result. Yenepoya cardiac surgical team had successfully performed the surgery of delamination of all three leaflet of tricuspid valve, plication of dilated arterialized ventricle and reformation on new tricuspid valve at proper position with out any leak or obstruction. This is third successful such procedure done by Yenepoya cardiac team. These procedures have high risk of heart block and pacemaker requirement. Meticulous surgery had prevented pacemaker requirement in all our patients. This patient was the most difficult as it was type 3 Ebstein's anomaly.

Patient has near normal Right ventricle function with normal functioning valve and her own heart rate of 80 beat per minute at the time of discharge.

Medical superintendent of Yenepoya Medical College Hospital Dr. Habib Rahman said Yenepoya cardiac center has experienced Cardiac Surgeons and Cardiac Anesthetists capable of managing all types of cardiac surgery with special expertise in valve repair, Aortic root procedure(valve sparing), Bentall procedure, ventricular restoration surgery, aortic arch replacement,coronary endarterectomyand Beating heart bypass surgery.

