Fetal Balloon Aortic valvuloplasty procedure performed

A Fetal Heart Team of a reputed private hospital in Kerala has performed the first ever in-utero structural cardiac intervention in the state.

Fetal Balloon Aortic valvuloplasty procedure was successfully performed in a 29-week fetus with Critical Aortic stenosis with severe Left ventricular dysfunction at Amrita Institute of Medical Sciences (AIMS) here recently.

Hospital authorities said the main outflow valve from the left ventricle of the heart was critically blocked in this condition with severe failure of the left ventricle.

Untreated, this condition had a very high likelihood of progression to a much more severe heart defect characterised by under-growth of the left-sided heart structures (Hypoplastic left heart syndrome), they said.

Under general anaesthesia to the mother, the fetal heart was accessed through the maternal abdomen under ultrasound guidance and the aortic valve dilatation was performed using a coronary angioplasty balloon-wire combination.

"The mother and the fetus remained stable after the procedure. The post-procedure fetal echocardiograms have
already started showing signs of improving ventricular function."

"It is expected that over the ensuing weeks till the pregnancy reaches term the ventricular function will recover and baby will be born with a stable circulation at birth," doctors said.

The team was coordinated by Dr Balu Vaidyanathan, Professor of paediatric cardiology, AIMS, with technical expertise provided by Dr Nageswar Rao, Consultant paediatric cardiologist, CARE Hospitals, Hyderabad (the only other centre in India that has performed this procedure) and Dr Vivek Krishnan, Perinatologist, AIMS.

Meanwhile, an annual academic event, Fetal Heart 2015 is being organised at Amrita Institute of Medical Sciences, Kochi.

A galaxy of national experts in fetal cardiology and more than 150 delegates from all over India as well as South Asia are attending the two day event.