



CONGENITAL HEART DEFECT – A CASE REPORT

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ABSTRACT:

Coarctation of the aorta is a birth defect in which a part of the aorta, the tube that carries oxygen-rich blood to the body, is narrower than usual. An estimated incidence of approximately 3 cases per 10000 births has been recorded. Coarctation of the aorta may occur as an isolated defect or in association with various other lesions, most commonly bicuspid aortic valve and ventricular septal defect (VSD). The most common symptoms are Chest pain, head ache, difficulty in breathing, high blood pressure etc.. The cause of coarctation of the aorta is unclear. Coarctation of the aorta is more common in males than in females. Having certain genetic conditions, such as Turner syndrome, also raises the risk of coarctation of the aorta. Complications includes haemorrhage , coronary artery disease , stroke. This condition can be diagnosed by ECG , CT scan .A 17 years old patient admitted in cardiology department in DDHRC with chief complaints of shortness of breath ,k/c/o-CHD. On examination patient was found to be conscious, coherent . ECG showed sinus rhythm , CT aortogram showed coarctation of aorta with bicuspid Av. Initially patient was treated intravenous antibiotic ,anticoagulants ,antiplatelets ,statins and other supplements

INTRODUCTION:

Coarctation of the aorta is a narrowing of the aorta, most commonly occurring just beyond the left subclavian artery. However, it can occur in various other locations of the aortic arch (proximal transverse) or even in the thoracic or abdominal aorta. The narrowing of the aorta raises the upper body blood pressure, causing upper extremity hypertension. Unrepaired coarctation leads to premature coronary artery disease, ventricular dysfunction, aortic aneurysm/dissection, and cerebral vascular disease by the third or fourth decade of life.

Coarctation of the aorta is a relatively common form of congenital heart disease, with an estimated incidence of approximately 3 cases per 10000 births.

The exact cause of coarctation of the aorta is unknown. It results from abnormalities in development of the aorta prior to birth. Aortic coarctation is more common in people with certain genetic disorders, such as Turner syndrome. Coarctation of the aorta symptoms depend on how much of the aorta is narrowed. Most people don't have symptoms. Mild coarctation may not be diagnosed until adulthood Babies with severe coarctation of the aorta may show symptoms shortly after birth. Symptoms of coarctation of the aorta in infants include: Difficulty breathing, Difficulty feeding, Heavy sweating, Irritability Pale skin

Coarctation of the aorta is usually diagnosed by echocardiogram (ultrasound pictures of the heart). Cardiac magnetic resonance imaging), cardiac CT (computerized tomography scan), and cardiac catheterization angiography also show aortic narrowing.

COMPLICATIONS: Bleeding in the brain (haemorrhage), Aortic rupture or tear (dissection), Enlargement in part of the aorta's wall (aneurysm), Premature narrowing of the blood vessels that supply the heart (coronary artery disease)

MANAGEMENT: Iv antibiotics, Iv antiplatelet, Statins, Supportive care

CASE REPORT:

A 17yrs old male patient was admitted to cardiology department in Durgabai Deshmukh hospital of research centre with chief complaints of shortness of breath, k/c/o - CHD and admitted for further management On physical examination patient was found to be conscious, coherent .. and vitals were found to be BP - 110/80mmhg, HR - 80bpm, RR - 24/min, Temperature: Afebrile Systemic examination: -CVS - S1S2+, RS - BAE, Abdomen - soft

CNS – NAD, GCS - 15/15 For further investigations the patient was subjected for laboratory evidence and was found to be , ECG showed sinus rhythm , CT Aortogram showed coarctation of aorta with bicuspid AV. Hb - 11.8, TLC – 5600, ESR - 3hrs, PLT - 2.3, Blood urea – 16, Serum creatinine - 0.8

And was further diagnosed with coarctation of aorta .Initially the patient was treated with IV antibiotics , antiplatelets , statins and other supportive medications.

Routine investigation were normal . patient was taken for coarctation of aorta stenting (14×40mm & 18×60mm) Boston scientific was done with good results.

Post procedure no complications.. Fluoroscopy was done. Patient was stable at time of discharge and long term prognosis was explained in detail.

Tab . Chymoral forte TID

Tab . MetxL 25mg OD

Tab . Ecosprin 150mg OD

Tab . Monocef 200mg BD

Tab . PAN - D 40mg OD

Review after 1 week.

DISCUSSION:

Coarctation of aorta is a rare congenital heart defect that leads to narrowing of aorta blood vessels.

Patient was treated with antibiotics, antiplatelets, statins.: Patient was taken for stenting (14×40mm & 18×60mm) Boston scientific was done.

Thus , to study rare case the management is done by providing above treatment

CONCLUSION:

Thus the motive of this report is to create awareness in cardiology sector , about the rare condition and necessity to provide patient counselling of long term effect ..

REFREANCE:

www.ncbi.nlm.nih.gov/books

www.mayoclinic.org