

Case Report on Management of Endocarditis with Double Valve Replacement

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ABSTRACT:

Introduction : The number of events per million patient-years varies between 30 and 100 . In the previous decade, increasingly difficult intracardiac infections requiring complex reconstructive surgery have been observed due to an increase in the number of intracardiac interventions and device implantations in patients with growing age, multiple comorbidities, and weakened immune. This is also due to the fact that separating the aortic root from the anterior mitral leaflet Surgical surgery can be difficult if the IFB is destroyed, especially if an abscess forms as a result of infective endocarditis . Debridement of all contaminated tissue, followed by replacement and restoration of the aortic and mitral valves.

Clinical findings: Chief complaint was pain in chest and Edema (swelling) of the feet, ankles, or abdomen is a common ailment (belly) Fluid retention causes rapid weight gain. Dizziness Pain in the chest Breathing problems, Palpitations, edema (swelling) of both feet, ankles. Chest X-ray, ECG, blood tests, echocardiography and coronary angiography were advised.

Therapeutic intervention: Medical management was provided to the patient interferon alpha 2b solution was given for 10 days to enhance immune function. antiplatelets **clopidogrel** (Plavix) mono-antiplatelet therapy double valve replacement.

He took all treatment and outcome was good. Her sign and symptoms was reduced, she was able to do her own activity. No any change in intervention in the therapeutic process

Conclusion: He took all medication as well as doctor treatment and his recovery was good.

Keywords:- acute chest pain and Surgery, TAVI, Mitral Clip, Aortic valve replacement, Mitral valve replacement, Valve migration

Introduction:

Infective endocarditis is a deadly illness with a high death rate. The number of incidents per million patient-years ranges between 30 and 100 . Because of the increasing frequency of In individuals who are becoming older and have a lot of comorbidities, intracardiac surgeries and device implantations are a good idea and have weakened immune systems, In the recent decade, increasingly complicated intracardiac infections have been discovered, necessitating extensive repair surgery. This can also be due to the fast advancement of surgical methods designed to deal with complex circumstances . The One example is the involvement of the intervalvular fibrous body (IFB). The anterior mitral leaflet, as well as sections of the left and non-coronary cusps, are connected to the heart's fibrous skeleton via this fibrous structure. Between the lateral and medial fibrous trigones, it is located. It's also linked to the dome of the left atrium, which connects the anterior mitral leaflet to the aortic root. Surgical

surgery can be difficult if the IFB is destroyed, especially if an abscess forms as a result of infective endocarditis. Radial debridement of all diseased tissue, followed by replacement of the aortic and mitral valves and repair of the IFB, is the only therapeutic choice for these patients. The mortality rate has been reported to be high, ranging from 20% to 30%. A traditional heart valve procedure is insufficiently radical to avoid recurrence of infection and ensure a positive result. Despite a few case reports in the literature no significant case series has been published. Focusing only on infective endocarditis affecting the IFB exists. This is most likely due to the disease's rarity, as it is not often observed even in high-volume centers. Early and mid-term outcomes of infective endocarditis patients who had double valve replacement with IFB body reconstruction are examined in this retrospective research. ⁽¹⁾

The most common valvular heart disorders in Western countries are aortic stenosis and mitral valve regurgitation. The 'gold standard' of treatment for these illnesses is surgical valve replacement and repair. However, the ageing multi-morbid patient population has necessitated the development of novel treatment alternatives to control the increased perioperative risk in the last decade. The number of events per million patient-years varies between 30 and 100. In the previous decade, increasingly difficult due to a rise in the frequency of intracardiac procedures and device implantations in patients with increasing age, numerous comorbidities, and difficult reconstructive surgery, intracardiac infections requiring complex reconstructive surgery have been documented and weakened immune. This is also due to the fact that separating the aortic root from the anterior mitral leaflet surgical surgery can be difficult if the IFB is destroyed, especially if an abscess forms as a result of infective endocarditis. Debridement of all contaminated tissue, followed by replacement and restoration of the aortic and mitral valves. ⁽²⁾

Patient information: The Male patient 32 year old who was admitted in AVBRH on date 03/05/2021 with the complaints of Chief complaint was pain in chest and Edema (swelling) of the feet, ankles, or abdomen is a common ailment (belly) Fluid retention causes rapid weight gain. Dizziness Pain in the chest Breathing problems, Palpitations, edema (swelling) of both feet, ankles. Chest X-ray, ECG, blood tests, echocardiography and coronary angiography were advised.

Past history: 6 month ago patient admitted in rural hospital Yawatmal with chief complaint of back pain, loss of appetites, fever. After that X-ray was done and the treatment was initiated for that.

The main diagnosis, therapeutic intervention and outcomes: Infective endocarditis with double valve replacement.

Medical family and psychosocial history: Patient had medical history of double valve replacement before 2 month. And history of splenomegaly with pemphigus vagaries. He took treatment for that but not cure. He belongs to nuclear family. There are five members in his family. All family members are healthy except the patient. patient look anxious, depressed and confused.

Relevant past intervention with outcome: history of cirrhosis of double valve replacement 3month back for which she was hospitalized for 11 days. After Chest X-ray and Cardiac MR was observed he took treatment for that. And her outcome was not good.

Physical examination and clinical finding:

General examination –

state of health was unhealthy,

thin body built, but distension of necrosis the height of patient is 165 cm

weight is 55kg. her vital parameters are normal.

Timeline: 3 month ago she was admitted in the hospital for 11 days for the treatment of necrosis. Hi was also hospitalized for the treatment of double valve replacement Currently she was admitted for the treatment of double valve replacement.

Diagnostic assessment:

Doctor assessed signs and symptoms as well as perform a physical examination. Echocardiography, ECG, X-ray of a chest, exercise or stress tests were advised. ⁽³⁾

Diagnostic assessment:

Diagnostic challenging: No any challenging during diagnostic evaluation.

Diagnosis: After physical examination and investigation doctor diagnose a case of Double valve replacement

Therapeutic intervention:

Medical management was provided to the patient interferon alpha 2b solution was given for 10 days to enhance immune function. antiplatelets **clopidogrel** (Plavix) mono-antiplatelet therapy double valve replacement. He took all treatment and outcome was good. His sign and symptoms was reduced, she was able to do her own activity. No any change in intervention in the therapeutic process. ⁽⁴⁾

Clinical and patient assessment outcomes: Patient condition was improved. Important diagnostic and other test results followed up to prevent the progression of disease and trying to reserve any sign and symptoms that have appeared because of reduced of pain. Doctor advised follow up after 1 month.

Echocardiography, ECG with X-Ray of the Chest, Cardiac MR, Cardiac stress testing or exercise tests and investigation and blood pressure examinations were done to know the further disease progression.

Intervention adherence and tolerability: Patient took all prescribed medications regularly. But sometime she was refused to take medication. Hi also followed the dietician advised. Dietician was advised rich in vitamin A and protein and fat supplementation. Her interventional adherence was satisfactory. ⁽⁵⁾

Adverse and unanticipated events: no any.

Discussion:

The intervalvular fibrous body between the aortic and mitral valves can be damaged by infectious endocarditis, degenerative calcification, or multiple prior heart valve operations, making double valve replacement problematic. The aortic and mitral valves were accessed via the aortic root and the left atrium's dome, which solved the condition. The condition returned after the aortic valve was removed. The aortic and mitral anuli are re-established by suturing a carefully designed Patch the lateral and medial fibrous trigones, as well as the aortic root, with Dacron fabric or bovine pericardium. A prosthetic mitral valve is placed before a prosthetic aortic valve is inserted, and a separate patch is

utilised to seal the left atriotomy. The purpose of this research was to see how effective this procedure was. Important diagnostic and other test results that need to be followed up on.⁽⁶⁾

The patient was admitted to hospital with chief complaints of distension of double valve replacement. After all investigations patient was diagnosed with a case of double valve replacement. In our case stresses the need for good clinical assessment, good nursing care by trained nurses and the use of effective forensic studies is compulsory to secure patients from such a vital health condition.^(7, 8) A number of studies on cardiovascular diseases were reviewed⁽⁹⁻¹⁵⁾.

Conclusion:

For infective endocarditis, double valve replacement with intervalvular fibrous body reconstruction is a complicated, technically hard procedure with substantial perioperative morbidity and mortality. Nonetheless, because it is the only alternative for such a complicated illness, it should be undertaken in these individuals who would otherwise die.

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