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A Case Study

**CASE STUDY: OBSTRUCTIVE HYPERTROPHIC
CARDIOMYOPATHY**¹ Shireen Ali, ² Muhammad Afzal, ³ Ms Hajra Sarwer¹ Rn (BSN) 2nd semester student, Lahore School of Nursing, University of Lahore² Head of Department Lahore of School of Nursing³ Lecturer Lahore School of Nursing

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Abstract:

It is very complicated disease. In this disease the ventricular cavity block this disease cause sudden death Myocardium hypertrophic in this disease septum and lateral wall of the ventricular of the side. It can also been in middle and apex of the myocardium. The Trans apical also involve now I have a case of patient treated using new therapy.

A patient age 27 came with the complaint of chest pain. He was brought to public health care unit he was bearing sever chest pain twelve day before admitted are hospital His ECG was normal myocardial infaction . Patient history do not show any kind of heart disease. His father was suffering from tuberculosis and died at the age of 83 from this disease. Its signs and symptoms to come to patient were shortness of breath tightness of chest with back pain. But it can be done at specific rules and it is procedure with Tran's aortic approach. Hypertrophic myocardium is on mid apical segment than surgery should be proceed with transposal approach.

A selected patient with mid apical HOM 'for improving functional status, Tran apical myomectomy is an effective option for surgical treatment. Refractory to medical therapy this surgical technique is a new approach as the treatment of patient which have diastolic heart failure. Despite of medical treatment, the patients which have diastolic heart failure must undergo trans apical myomectomy this kind of surgery is an option for improving functional status of patient who is suffering from mid apical HOM.

Corresponding author:**Shireen Ali,**

Rn (BSN) 2nd semester student, Lahore School of Nursing,
University of Lahore

QR code



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INTRODUCTION:

It is very complicated disease. In this disease the ventricular cavity block this disease cause sudden death Myocardium hypertrophic in this disease septum and lateral wall of the ventricular of the side. It can also been in middle and apex of the myocardium. Medical therapy is important treatment in Hypertrophic myocardium. Calcium channel and B blockers are very useful for the treatment. In artery and ventricle the symptoms of the patient indicated and treated by medical therapy by surgery the patient is threated it is standard process. The surgery is done as Trans aortic approach in hypertrophic the middle part is involved. The Trans apical also involve now I have a case of patient treated using new therapy.

CASE PTESENTATION:

A patient age 27 came with the complaint of chest pain. He was brought to public health care unit he was bearing sever chest pain twelve day before admitted are hospital His ECG was normal myocardial infaction . Patient history do not show any kind of heart disease. His father was suffering from tuberculosis and died at the age of 83 from this disease. Its signs and symptoms to come to patient were shortness of breath tightness of chest with back pain. Vitals signs temp is 98.9 f, BP 140/80 pulse rate 78 /min Resp 21/mints.his blood group is 0 positive The most important sign and symptoms occurs in this disease is chest pain on medically ANGINA PECTORIS .It can be sever or not they may occur in heart and often in left arm and shoulder . It is a warning sign that blood supply to heart muscle is not sufficient it continue to proceed toward shortness of breath. But it can be done at specific rules and it is procedure with Tran's aortic approach. Hypertrophic myocardium is on mid apical segment than surgery should be proceed with transposal approach.

The genes which makeup the contractile apparatus of heat if become mutated this cause hypertrophic cardiomyopathy so this is a genetic disease which occur due to mutation in genes the incidence of this disease is .1 out of every 500 adult or may be 0.2./ This disease is characterized by a pathological condition called hypertrophy also this can in this disease the pathological portion is left ventricle the process of vasodilation and pressure is disturbed and cause various hemodynamic abnormalities. The abnormalities depends on the extent of complexity of disease and its sites also this can cause following complexities.1 myocardial ischemia. Ischemia is restriction of blood flow to specific tissue2 Diastolic

abnormality 3 l/v outflow restoration 4ntral regurgitation. Due to these abnormalities, a number of structural and functional complexities occur which shows the following 1fatigue (faintness) 2dysapnea3angina4palpation 5presyncope or syncope. It we take about this disease in broader way the symptoms will change like that symptoms will conceive to myocardial infarction or heart failure Angina pectoris or chest pain or arrhythmias the patient with HCM can also suffer more complexities such as supra ventricular and ventricular arrhythmias and these patients are at the high risk of sudden cardiac death.

Firstly the echocardiogram of patient was performed which was normal. After this Complete blood count of patient was performed which was almost good the patient WBC count, PVC, MCHC, platelet, neutrophil, lymphocytes, monocytes and eosinophils all were normal the patients Hemoglobin, MVC and MCH were below normal and total RBCs were above normal. The treatment of HOCM mostly start with the medicines the most important medicines given is this case are b-blockers and calcium channel blockers. Another way of treatment for this disease can be surgery. After this his coagulation profile was also performed in which his Prothrombin time was normal and APT was above normal. His Liver function tests and renal function tests were also performed and all the results were also normal. His secology quantitative reports were also negative. His serum electrolyte like sodium, magnesium, potassium, calcium, and serum phosphorus were also normal and suspect ion of hepatitis was also negative.

As the patient alive first he was relied on medicines such as calcium channel blocker and B blocker but and the surgery was successful under the surgeon Mazhar-ul-Rehman. He was very brilliant in cardiac surgery as well as.

DISCUSSION:

HCM has a marked variability in morphological expression and natural history. In this disease there is diffuse left ventricular hypertrophy and it mainly involve proximal but in some case mid ventricular and apical hypertrophy is also observed. An apical aneurysm can happen due to interventricular pressure gradient. Due to this pressure gradient an obstruction muscle in the mid ventricular gradient is > 30 mm hg than it is mid ventricular obstruction the patient which do not have obstruction or left ventricular out flow tract obstruction are not symptoms. Patient which have

mid apical HOM are symptoms. The incidence of the chronic death or arrhythmic events is mostly high. The medical surgery these patient are mostly B – blockers and calcium channel blockers and disopyramide the patients with which have mid apical hypertrophy show worse result. But this treatment is effective in many patients with mid apical hypertrophy mostly treated as cardiac transplantation or surgical resection should be done of hypertrophy portion of ventricle. A new surgical technique was proposed for the management of severely symptomatic patient with apical HOM and it was termed as apical ventricular were also normal.

His serology Quantitative reports were also negative His serum phosphorus were also normal and suspicion of Hepatitis was also negative As the patient alive first he was relived on the medicine such as Calcium Channel Block`er and Beta blocker. But his pain do not stop he continue to feel pain chest.

After this he was decided to do surgery of this patient and the surgery was successful under the Mazhar-Ul-Rehman.

After surgery the patient was discharged after almost 7 days. He was advised to follow up, after one week of his first follow up he has complaint of back pain. He was admitted to the ward for the betterment of the patient. The treatment was given to the patient. When IV line passed blood does not clots. Blood rapidly draw output become faint due to loss of blood. Because he was given a high dose of HEPARIN to prevent blood dots. After 15mintes of this incidence patient expires.

CONCLUSION:

A selected patient with mid apical HOM for improving functional status, Tran apical myomectomy is an effective option for surgical treatment. Refractory to medical therapy this surgical technique is a new approach as the treatment of patient which

have diastolic heart failure. Despite of medical treatment, the patients which have diastolic heart failure must undergo trans apical myomectomy this kind of surgery is an option for improving functional status of patient who is suffering from mid apical HOM.

REFERENCES:

- 1 Pawar AY. HOCM diagnostic dilemma. *J. Evid. Based Med. Healthc.* 2018; 5(15), 1342-1344. DOI: 10.18410/jebmh/2018/278.
- 2 Nishimura, R. A., & Holmes Jr, D. R. (2004). Hypertrophic obstructive cardiomyopathy. *New England Journal of Medicine*, 350(13), 1320-1327.
- 3 Deng, L., Huang, X., Zuo, H., Zheng, Y., Yang, C., Song, Y., & Tang, D. (2018). Angle of attack between blood flow and mitral valve leaflets in hypertrophic obstructive cardiomyopathy: an in vivo multi-patient ct-based fsi study. *Computer Modeling in Engineering & Sciences*, 116(2), 115-125.
- 4 Maron, B. J., Rowin, E. J., Casey, S. A., & Maron, M. S. (2016). How hypertrophic cardiomyopathy became a contemporary treatable genetic disease with low mortality: shaped by 50 years of clinical research and practice. *JAMA cardiology*, 1(1), 98-105.
- 5 Acharya, D., Doppalapudi, H., & Tallaj, J. A. (2015). Arrhythmias in Fabry cardiomyopathy. *Cardiac electrophysiology clinics*, 7(2), 283-291.
- 6 Schaefer, U., Frerker, C., Thielsen, T., Schewel, D., Bader, R., Kuck, K. H., & Kreidel, F. (2015). Targeting systolic anterior motion and left ventricular outflow tract obstruction in hypertrophic obstructed cardiomyopathy with a MitraClip. *EuroIntervention: journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology*, 11(8), 942-94