

# **RESEARCH ARTICLE**

# ANAESTHESIA MANAGEMENT IN PATIENT WITH LOW EJECTION FRACTION

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 Manuscript Info
 Abstract

 Manuscript History
 Congestive heart failure is a major health burden, affecting 45 million people globally, and dilated cardiomyopathy is one of its leading causes.anaesthesiologists are responsible to provide safe perioperative discusses.anaesthesiologists are responsible to provide safe perioperative discusses.anaesthesiologists are responsible to provide safe perioperative

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care for patients with low ejection fraction.here we discussed about the

patient who undergone hernia repair with low ejection fraction.

### Introduction:-

A case of 55years old presents with a complaint of swelling in the groin with cough impulse positive.patient was apparentely normal 3months back.patient presented with pain in the groin region with a size 3\*3 cm with omentum as content.pt was a known case of type 2 diabetes mellitus for 20yrs.on tab.reclimet(glicazide 80mg and metformin 500mg) and human mixtard 30/709biphasic isophane insulin).pt was having hypertension for past 15years.telmisartan OD and metoprolol 50mg BD.pt known case of CAD,on clopitet-a 75mg OD.since last 6years,pt was having poor effort tolerance and not able to carry out regular activities.pt was having low ejection fraction of 35%.

#### **On systemic examination:**

cvs-first and second heart sounds heard with ejection systolic murmur. ECG shows LAD,LVH,tall T waves in V1 TO V6,ST depression in v1 to v3.ECHO shows global hypokinesia of LV,severe LV systolic dysfunction EF-35%,posterior mitral annular calcification,aortic valve sclerosed with calcification,dilated left atria/left ventricle ,grade 4 diastolic dysfunction.

#### **Investigations:**

Haemoglobin-8.8gm%,TC-7000/mm3,platelet-167000lakhs/mm3,BT-1 minute 30 seconds,CT-2minute 30 seconds,RBS-70mg/dl,blood urea-34mg/dl,creatinine-0.6mg/dlserology -negative.prothrombin time -17,INR-1.7. our plan of anaesthesia management for this case was single shot epidural anaesthesia with epidural topups after one hour.

#### Management:

After shifting the patient to the ot,all basic ASA recommended monitors were attached.patient was kept in right lateral position under aseptic condition,parts painted and draped.L2-L3 Space identified.18G epidural neddle was inserted,by using loss of resistance technique,18G epidural catheter was inserted and fixed at 9cm.a single of injection lignocaine plus adrenaline 2% 15cc given epidurally.paitent vitals monitered.at the end of procedure,procedure uneventful.

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## **Discussion:-**

Anaesthesia goals in this patient with low EF include maintaining forward flow and promoting inotropy.the key point in this case was to avoid myocardial depression, maintain hemodynamic stability and meeting the requirements of surgery

The main aim of using single shot epidural injection was to attain anaesthesia with minimal cardiovascular and respiratory changes.hypotension and bradycardia can be prevented.in this case,intraoperatively patient vitals was normal and in case of severe anaemic patients ,we can prefer this procedure.postoperative pain management was also highly effective.our intention was to maintain hemodynamic stability and minimize other anaesthesia related perioperative side effects by avoiding spinal anaesthesia and to go with epidural anesthesia with procedure went uneventful



# **Conclusion:-**

Single shot epidural injection with epidural topups prevents intraoperative hypotension and bradycardia.it also highly useful in post operative pain management.we believe that selective epidural anaesthesia can be a useful alternative anaesthetic technique in patients with low ejection fraction undergoing major surgical procedures.