



ANAESTHETIC MANAGEMENT OF A CASE OF VARICOSE VEINS SURGERY,IN A PATIENT WITH EBSTEIN'S ANOMALY.

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KEYWORDS :

INTRODUCTION

Ebstein's anomaly is rare congenital heart disease ,in which there is downward displacement and elongation of tricuspid valve with poor contractile right ventricle ,characterized by dysplastic abnormalities of both basal and free attachments of tricuspid valve leaflets resulting in tricuspid regurgitation. It is frequently associated with intracardiac shunting , pulmonary hypertension,cardiac dysrhythmias, cyanosis, congestive heart failure and sudden collapse are the most common causes of death . The incidence in general population is 1:10,000 and no sex difference.

Case report:

A 50 years old male patient moderately built presented with varicose veins of left leg. He had chest pain ,easy fatigability,exertional dyspnoea since 25years.He is the known case of ebstein's anomaly, which was diagnosed in jayadeva hospital 10 years back. On examination he had regular pulse rate of 92bpm and blood pressure of 100/60mm of Hg with grade 2 clubbing. There was no signs of cardiac failure.On auscultation of heart sounds ,a pansystolic murmur was audible in mitral and tricuspid areas.2D ECHO shows ebsteins anomaly, severe tricuspid regurgitation, patent foramen ovale R>L Shunt with ejection fraction 60% .ECG shows low voltage complexes and tall p waves in lead 2,AVR,AVF with rbbb . chest x ray shows cardiomegaly with CT ratio of 11:17, hes on Tablet frusilac (frusemide 20mgand spirinoactone50mg) and Tablet dafilon 500mg,routine bloodinvestigations were within normal limits , epidural anaesthesia was planned for trendelenberg surgery. Tablet Pantoprazole 40mg and Tablet anxit 0.5mg was given the previous day and ranitidine 150mg,Tablet frusilac was continued on the day of surgery. IV line was secured with 18G canula ,antibiotic prophylaxis for infective endocarditis was given (inj ampicilin 2gm and gentamycin 80mg),routine monitoring was done .in the sitting posture under aseptic precautions epidural anaesthesia achieved by injecting 10ml of 0.25% of bupivacaine with 75mcg fentanyl at L3-L4 Epidural space with loss of resistance technique and hanging drop test, epidural catheter passed and drug is given. No intaoperative fall in blood pressure . BP was maintained 100/60 mmof Hg which was maintained with ephedrine infusion, haemodynamics were maintained, surgery was lasted for 44 minutes. Post op analgesia given with 0.0625% of 8cc bupivacaine and advised for low molecular weight heparin and early ambulation was advised to prevent thromboembolic episodes.



FIGURE 1: Clubbing is present grade 2.

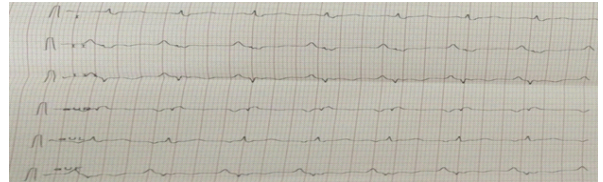


FIGURE 2:ECG showing tall Himalayan p wavesin lead II,III,avF with left axis deviation.

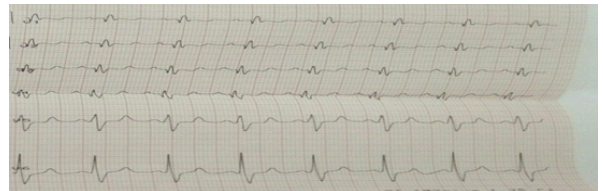


FIGURE 3:ECG showing RBBB with tall p waves.

TABLE 1: These are ECHO reports of the patient.

2009	2014	2019
Congenital heart disease	Congenital heart disease	Congenital heart disease
Situs solitus .	Situs solitus.	Situs solitus.
Ebstein's anomaly.	Ebsteins anomaly.	Ebsteins anomaly
Mild tricuspid regurgitation.	Severe tricuspid regurgitation (grade 3).	Severe tricuspid regurgitation .
Ostium secundum ASD	ASD	PFO
R>L Shunt	R>L Shunt	R>L Shunt
Normal LV function(60%)	Normal LV function(65%)	Normal LV function(60%)

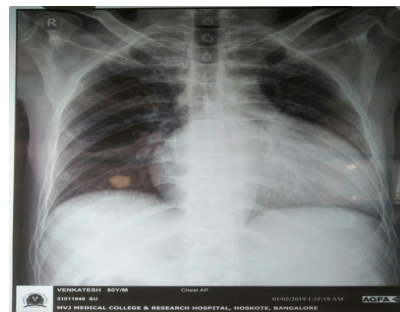


FIGURE 4:CHEST X RAY PA view showing cardiomegaly, BOX Shaped heart.

DISCUSSION

The prime consideration in managing our case was to maintain haemodynamic stability ,maintaining preload and afterload and prevention of supraventricular and ventricular arrhythmias during and in the post operative period .the case study shows the safety of low dose epidural with ebsteins anomaly with severe tricuspid regurgitation.the advantages of epidural anaesthesia are minimal intravascular volume

shift, decreased catecholamine levels and good postoperative analgesia. low concentration of 0.25% of bupivacaine has low cardiac and systemic toxicity. fentanyl 75mcg helps in attenuating the hormonal responses to stresses associated with surgery

CONCLUSION

A thorough understanding of the pathophysiology of this condition is essential for the successful anaesthetic management in Ebstein's anomaly and anaesthetic technique chosen should be individualized based on cardiac status, type of surgery, site of surgery and also the duration of surgery, our experience shows that, a low dose epidural should be considered as one of the options available in Ebstein's anomaly for lower limb surgeries.