Letter To The Editor: Autopeep Due To Cardiac Pulsations

A Singh

Citation
A Singh. Letter To The Editor: Autopeep Due To Cardiac Pulsations. The Internet Journal of Anesthesiology. 1997 Volume 2 Number 3.

Abstract

CASE REPORT

37 year old Malay lady undergoing operation for uterine fibroid: Total abdominal hysterectomy with salphingo-oopherectomy as an elective procedure. She has history of chronic rheumatic heart disease with atrial fibrillation with moderate tricuspid regurgitation, mitral stenosis and aortic regurgitation. Mitral valvotomy was performed in 1990 for severe MS /MR. Presently not in heart failure. Current medications are :

- digoxin 0.125 mg daily
- furosemide 40 mg daily
- slow K 1 gm b.d
- penicillin V 250 mg b.d
- warfarin 2 mg daily

On Examination:

- Comfortable weight: 70 kg
- Able to lie flat
- Jugular venous pressure :not raised
- Blood pressure: 110/80
- Pulse: 82/min irregularly irregular
- Apex beat displaced on 6th ICL outside MCL.
- Gross parasternal heave noted
- Chest x-ray : gross cardiomegaly

ANESTHESIA

General anesthesia, premedication: diazepam 5 mg on-call to OR, Boyles machine checked

Induction:

- Thiopentone 250 mg
- Fentanyl 50 mg
- Vecuronium :6 mg

Uneventful intubation, connected to ventilator :OHMEDA 7900, volume control, circle system

Settings:

- Tidal volume :500 ml
- Rate:12/min
- O2/N2O :2:4
- Isoflurane 0.75%
- I:E ratio 1:2
- PEEP=0
- PIP :25-28 cmH2O

It was noted that the pressure gauge was showing autoPEEP =5 cmH2O with a fluctuating baseline. On ventilator disconnection pressure gauge needle returned to zero. On auscultation air entry was equal bilaterally with no sign of bronchospasm. The patient was adequately paralyzed with vecuronium. Unidirectional valves were rechecked and found to be functioning.

The cause of the autoPEEP was the result of the transmitted cardiac pulsations from the grossly dilated heart.
CONCLUSION
Unexplained autoPEEP on ventilator especially with a fluctuating baseline should lead one to think of a cardiac origin as a cause.

Sincerely yours,

Dr. Awtarjit Singh

References
Author Information

Awtarjit Singh, Dr.
Consultant Anesthetist, Sarawak General Hospital