

CASE REPORT

A Case of Atrial Fibrillation in the early Post Operative Period after a Routine Total Abdominal Hysterectomy

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Abstract

A 68 year old female patient presented with dysfunctional uterine bleeding for which she was posted for total abdominal hysterectomy under spinal anesthesia. Intraoperatively she was stable. In the early postoperative period she developed atrial fibrillations, for which she was managed appropriately with antiarrhythmics. Most probable cause of AF in the early post operative period includes age, fatigue, MI, excess intake of caffeine, thyrotoxicosis. AF is common in 1% of the early postoperative patients above 60yrs of age. Careful monitoring can prevent any complications.

Keywords: Atrial Fibrillation, Abdominal Hysterectomy, Spinal Anesthesia, Post Anesthesia Care Unit, Amiodarone.

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Introduction

Many a times post anesthesia care units are ill equipped to handle post surgical emergencies. This case is again an eye opener to revisit the importance of having a proper Post Anesthesia Care Unit in such a location where it can be monitored vigilantly by the nursing staff and anesthetists.^{1,2}

Case Report

A 68yr old female patient came to the gynaecology out patient with complaints of post menstrual bleeding and mass per vaginum on straining, since 1 month. She complains of sudden onset bleeding which gradually increased in severity. Menarche was attained at 12yrs of age. Earlier menstrual cycles were regular (30days/5days). No history of leucorrhoea. No history of foul smell. She was a known case of hypertension since 11yrs on oral Telmisartan +Hydrochlorothiazide (40 mg + 12.5 mg). Denovodiabetes since 10 days on oral Metformin 500mg once daily. Past obstetric

history Full Term Normal Vaginal Delivery Para 4Live 4, all were home deliveries. Last child born was 35 yrs ago. Excisional biopsy of a cervical growth taken a year back. On general examination palor was seen. No other relevant findings on general examination. Systemic examination of CVS, CNS, respiratory system were normal.

This case was posted for abdominal hysterectomy with bilateral salpingo-oophrectomy using a pfannensteil incision. On pre anesthetic checkup the patient had no complaints of cough, dyspnoea. Pulse Rate was 80/min. Blood Pressure was 130/90mm Hg and she was afebrile. Airway examination revealed Mallampatti grade 2, with mouth opening for 2 fingers, Temporo- Mandibular Distance /TemporoMandibular Joint was normal. Neck flexion and extension was normal. Systemic and general examination was normal. All her routine investigations were within normal limits

She was given an American Society of Anesthesiologists Grade 2. She was advised to continue her anti-diabetic medication. She was advised to get a fasting blood sugar done before

shifting to the operation theatre. 2 units of whole blood were reserved. An informed consent was taken. A oral tablet of Alprazolam 0.25mg was given the night before the surgery. Ondansetron 4mg was given intravenously just before the surgery.

TAH was planned under a subarachnoid block. Spinal Anesthesia given using 3 cc of 0.5%

bupivacaine heavy + 60 micrograms of Buprenorphine injected intrathecally in L3 – L4 space in sitting posture in midline approach with a 25 Gauge quincke needle. Cerebro spinal fluid flow was good and block was adequate upto T8 level. Monitors used were standard NIBP, Pulsoximetry, ECG .

The following were the vitals during the surgery:

Time	Pulse rate	SBP/DBP	SPO2	remarks
10:00 am	70/min	140/90 mmhg	100%	Nil
10:02 am	76/min	110/80 mmhg	100%	Nil
10:04 am	72/min	114/82 mmhg	100%	Nil
10:06 am	68/min	116/82 mmhg	100%	Nil
10:20 am	70/min	118/80 mmhg	100%	Intervention
10:30 am	74/min	120/80 mmhg	98%	Nil
10:40 am	76/min	130/90 mmhg	98%	Nil

Post operatively patient was conscious, oriented. Level of sensory block was upto T10 level with 2 segment regression. Bromage grade 4. No history of post operative nausea and vomiting. Pulse Rate was 64/min, Normal Sinus Rhythm. Blood Pressure – 130/90 mm Hg, Respiratory rate was 14 /min, Spo2 99% at room air. Patient was shifted to the PACU at the end of the surgery.

Early post operative period

About 3 hrs after the surgery patient started feeling restless, profusely sweating and started complaining of nausea and palpitations. Her vitals were PR – 150/min, irregularly irregular. BP – 100/60 mm Hg, RR- 18/min, afebrile. No abnormality was detected on systemic examination except for the irregular heart rate. ECG showed absence of P waves with tachycardia suggesting of atrial fibrillations with fast ventricular rate. Immediately 150 mg Amiodarone bolus was given intravenously and subsequently 900mg was given over 24 hrs. Pulmonologist opinion was obtained for other possible postoperative pulmonary thromboembolism and case managed according to consensus opinions.

AF subsided after 4 hrs. The cardiologist was consulted and oral Propranolol 25mg OD was also added to the treatment regimen. The patients vitals and ECG ware normal in the subsequent post operative days and the patient was discharged after 7 days.

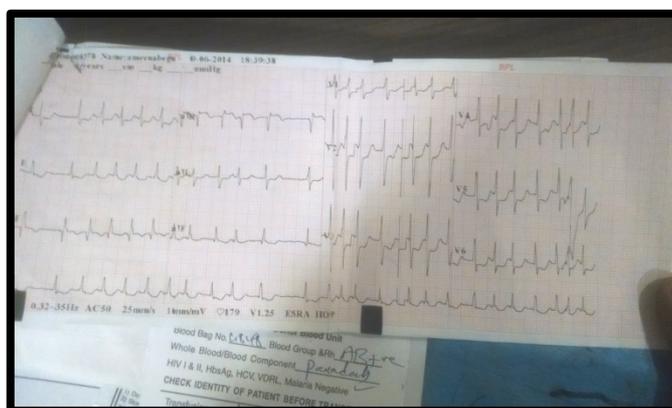
Discussion

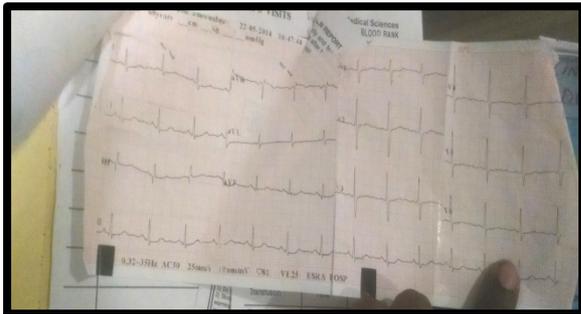
Causes of Atrial fibrillations in the post operative period include:^[3,4]

1. Age as a risk factor (>60yrs)
2. Fatigue
3. Myocardial sensitization to increased catecholamines
4. Excess intake of caffeine / theophylline in the pre operative period
5. Hypertension
6. Thyrotoxicosis
7. Pericarditis
8. Atrial septal defect
9. Pulmonary embolism

Complications of Atrial fibrillation include:^[5,6]

1. Thrombo embolic phenomenon leading to cerebrovascular accident/ stroke
2. Angina and myocardial infarction if undiagnosed





The former is a ECG showing AF compared with the patients preoperative ECG which was normal

Conclusion

AF is common in 1% of the post operative patients above 60yrs. Hence careful monitoring of the patients with pulse oximetry, BP, ECG is necessary to prevent any complications. Routine use of Aldreit score for discharge of patients from PACU should be advocated along with routine use of thromboprophylaxis is also necessary. Hence it is very important for a careful monitoring of vitals in the post anesthesia care unit during the immediate post operative period to avoid complications to worsen further.

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Ethical Permission: Obtained

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