Greener Journal of Medical Sciences
Vol. 12(1), pp. 143-144, 2022
ISSN: 2276-7797

https://gjournals.org/GJMS

Cardiogenic Shock in a Patureint with Mitral Valve Prosthesis "Case Report and Literature Review"

Akani CI[1]; Ogu RM[1]; John CO[1]; Nwafor E[2]; Amadi SC[3]

1) Department of Obstetrics and Gynecology, University of Port Harcourt Teaching Hospital.
2) Department of Medicine, University of Port Harcourt Teaching Hospital.
3) Cardiothoracic Unit, University of Port Harcourt Teaching Hospital.

ARTICLE INFO

Article No.: *022822025*
***Type*:** *Research*
Full Text: *PDF, HTML, EPUB, PHP*

Accepted: *28/02/2022*
Published: *25/03/2022*

***Corresponding Author**
Prof C.I Akani MBBS, FWACS, FICS
E-mail: *ciakaniph@gmail.com*

Keywords: *Cardiogenic shock, parturient, mitral valve, prosthesis.*

INTRODUCTION

Mitral valve replacement procedure has been on the increase in recent time, which has given hope of living to many patients that suffered various degrees of valvular diseases.[1,2]Cardiogenic shock is a rare and scary clinical incidence/ emergency during childbirth, but in patient on antithrombotic medications, increased vigilance and monitoring are indispensable to ensuring the integrity of the valve in place. Cardiogenic shock is often associated with high incidence of morbidities and mortality, hence should be avoided as much as possible especially in patients that have prosthetic valves in place.[3]Following any incidence of cardiogenic shock, there is usually systemic hypoperfusion, circulatory compromise, systemic inflammatory responses and subsequent multi organ dysfunction.[5]

Clinically, the patient presents with symptoms of breathlessness, weak, in some instances, there may be gasping for breath and acute confusional state. There are always features of tachypnoea, absent or thread pulse as well as hypotension or even unrecordable blood pressure.[6,10]

Hemodynamics of the cardiovascular physiology in a patient with mitral valve prosthesis may be unpredictable being a potential danger of complication.

Cardiac function may be compromised during labour, delivery and peripartum. Statutory precautions most times prevent or avert eminent danger, such as cardiac arrest, fibrillations and cardiogenic shock and even death.[7]

Stable clinical and therapeutic fibrinolytic or antithrombotic agents and surveillance remain the benchmark or gold standard to maintaining the integrity of the prosthetic valve, prevention of cardiogenic shock and its sequel as well as ensuring an optimum living.[8]

CASE REPORT

Mrs. PO, a 28 year old Nigerian born, security officer with tertiary education, of Igbo extraction and a Christian by faith. She is P1+^{0} (alive).

She presented to the facility with complaints of breathlessness of 12 days cough of 1 week and epigastric pain of a day duration. Breathlessness was of sudden onset. It was initially mild, and increased in severity, weakness, orthopnea, paroxysmal nocturnal dyspnea. There was also cough productive of frothy sputum, but not bloody.

The abdominal pain was sudden, sharp, severe, located at right hypochondrium and epigastric area. No abdominal swelling, distension or change in bowel habit. She presented to University of Port Harcourt Teaching hospital, having been delivered of a live male baby with birth weight 3.3kg two weeks before.

Her menache was at 13 years

A known cardiac patient with mitral valve replacement since 2012(6 years).

She is currently on Metoprolol, Sedenafil, Xareto, Digoxin, Bromocriptin, fluconacillin, Laxis, Omeprezole, and warfarin. Her latest INR was 1.37/ used to monitor the warfarin. Her BMI is 34.01kg/m^2

DISCUSSION

Choice of valve here unfortunately negates the haemodynamic changes in labour for a woman in her reproductive years. Child bearing remains a determinant factor for women between mechanical and biological prosthetic valves.[1-8]

The obese features were not favorable in her clinical state as this worsens the cardiac output, and poses her to increased risk of cardiogenic shock and its sequel.[9]She was not compliant to her medications, hence had episodes of atrial fibrillation which predisposed her to cardiogenic shock. Other factors include the anticoagulating agent “Warfarin” that was discontinued during labour for clexane. It is usually advisable to adjust the anticoagulant therapy over the different trimesters. Discontinuing warfarin for clexane at term before labour is the standard practice to avoid increased bleeding risk at labour.[1,2,10] However worthy of note was the patient’s choice of vaginal delivery against medical advice. This documentary offers to refresh memories of health care providers and practitioners of this very rare clinical entity of great importance.

In conclusion, management of obstetrics patient is multidisciplinary involving the obstetrician/gynaecologist, cardiologist, cardiac surgery team and other stake holders for a favourable outcome for both the mother and baby.

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Cite this Article: Akani, CI; Ogu, RM; John, CO; Nwafor, E; Amadi, SC (2022). Cardiogenic Shock in a Patureint with Mitral Valve Prosthesis “Case Report and Literature Review”. *Greener Journal of Medical Sciences*, 12(1): 143-144**.**