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FOGSI celebrates 75 years - Diamond Jubliee
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Title: **A CASE OF DYSPNOEA IN PREGNANCY: A DIAGNOSTIC DILEMMA**

INTRODUCTION

- Pulmonary Hypertension poses serious Maternal & Fetal Threats
- It is defined as a mean pulmonary arterial pressure (mPAP) ≥20 mmHg at rest
- It belongs to WHO Risk Group IV where pregnancy is contraindicated
- Termination is ideally done before 22 weeks
- WHO further stratifies Pulmonary Hypertension into 05 Groups

OBJECTIVE

A well managed case of Pulmonary Hypertension due to coexisting lung pathology using a multidisciplinary approach resulting in a favourable outcome

PRESENTING COMPLAINTS

25 years old G2P1L1 at 25 weeks 03 days POG

- **Dyspnoea** on exertion for 3 months gradually progressive (NYHA II / IV)
- Intermittent episodes of **palpitations**

MENSTRUAL HISTORY

Menarche – 14 yrs
LMP- 01.06.2023 EDD- 08.03.2024

OBSTETRIC HISTORY

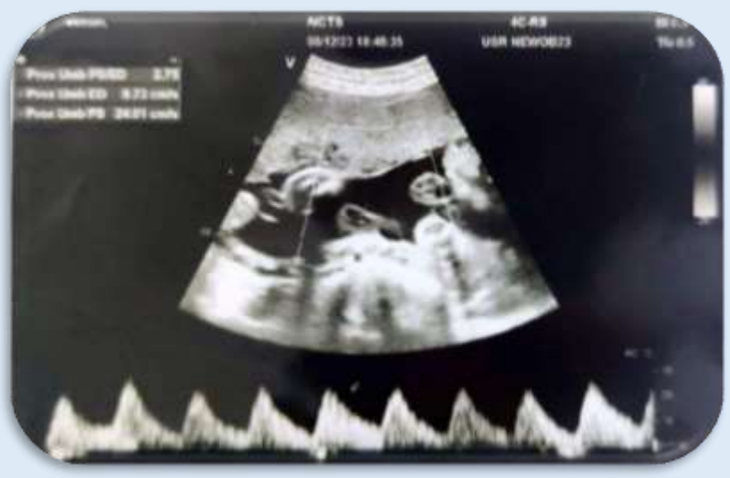
G1- 2020/FTND/40 wks 2 days/Uneventful/Female/2.9 Kg

Past/Personal/Family-NAD

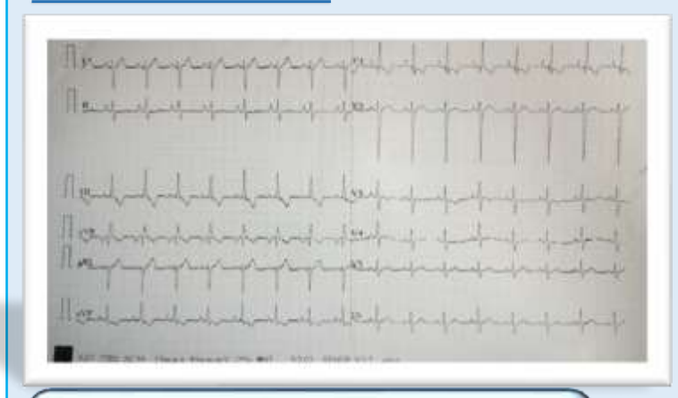
GENERAL EXAMINATION

Height- 154 cm
BMI- 18.55 kg/m^2
B.P- 94/60 mm Hg(Right Arm supine)
spO_2- 84% on room air
RR-26/min
Pallor++ /Clubbing +
JVP (6 cms above sternal angle)
P/A- Uterus around 24-26 wks
Foetal parts palpable
External ballottement +
SFH- 24 cm, FHS+

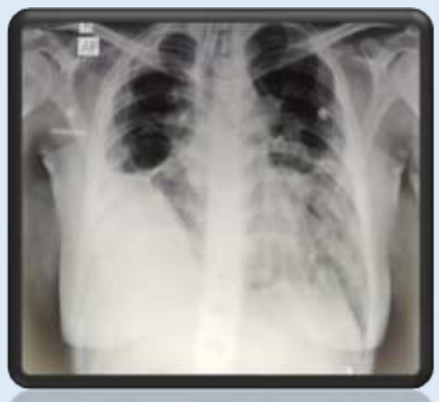
USG Obstetrics
(28 wks 1 day)
SLIUF+, FCA+, FM+, cephalic presentation, USMA- 27wks 1 day, Liquor- adequate, AFI-12 cm, UA/SD- 2.75, EFW- 894 gm



INVESTIGATIONS



Sinus tachycardia, Rt axis deviation, RBBB & RV strain pattern



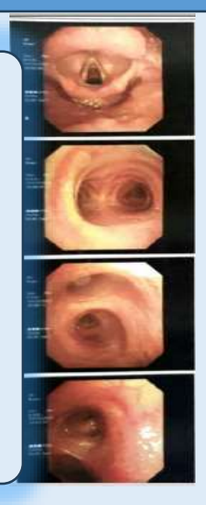
USG chest showed minimal collection rt pleural space Reduced rt lung parenchymal volume,rt hemidiaphragm pushed up

CARDIAC CT

NCCT Chest- B/L destroyed upper lobe with bronchiectasis in B/L lower lobe

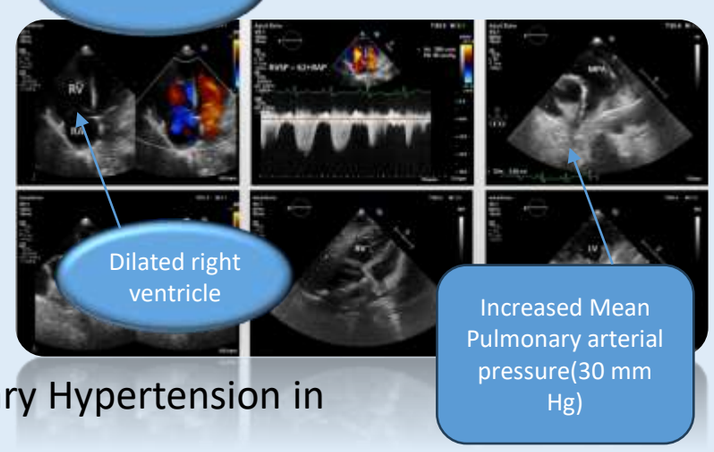
Right atrial and right ventricle enlarged
No PDA seen
Pulmonary arterial hypertension present

BRONCHOSCOPY



Rt main bronchus subsegment showed- distorted anatomy of right upper lobe bronchus with mucoid secretion oozing

2D ECHO



Dilated right ventricle

Increased Mean Pulmonary arterial pressure(30 mm Hg)

Impression : Pulmonary Hypertension in pregnancy

Plan: Elective LSCS AT 30 Weeks 02 Days

Epidural analgesia with transversus abdominis plane block

Post-op period pt observed in respiratory ICU and initially continued on HFNC

Inotropes – Milrinone, Adrenaline, Vasopressin continued and gradually tapered off by POD 3

HFNC continued till 3 weeks post op, weaned off

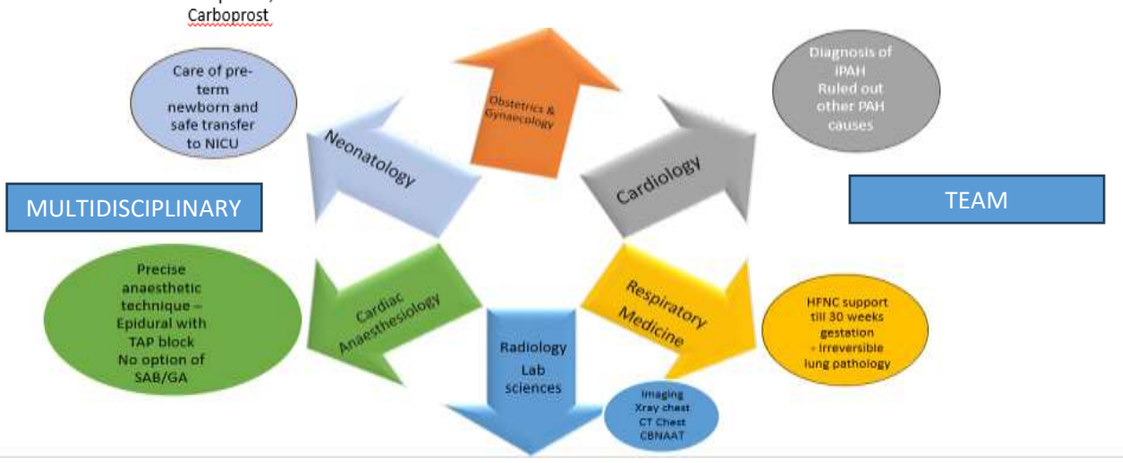
Patient initially on oxygen via nasal cannula (at 1-2 LPM) till 12 weeks postpartum

PPH in immediate postpartum period- managed with Carbetocin, Misoprostol, Carboprost

Epidural analgesia continued for 72 hrs

Mother and baby discharged on post op day 34

Presently patient is off oxygen support



DISCUSSION

- Presence of pulmonary hypertension (mean pulmonary artery pressure >20 mmHg), a pulmonary arterial wedge pressure 15 mmHg or less and pulmonary vascular resistance (PVR) at least 3 mmHg/l/min
- High Risk and Contraindicated
- Termination of pregnancy Gestational age at presentation
- Associated with a 3-yr mortality of 55%
- Multidisciplinary team approach and tailored therapy - safe delivery of mother and baby

CONCLUSION

- Diagnostic enigma
- Multidisciplinary approach
- LSCS in semi- recumbent position & PPH mgt
- Diagnosis of Gp 3 PAH ruled out other PAH causes
- HFNC support till 30 weeks gestation
- Irreversible lung pathology
- Imaging Xray chest/CT Chest/CBNAAT
- Precise anesthetic technique – Epidural with TAP block; No option of SA/GA
- Care of pre- term newborn and safe transfer to NICU

Acknowledgements
Cardiologist, Neonatologist, Cardiac Anaesthetist

REFERENCES

1. Hsu CH, Gomberg-Maitland M, Glassner C, et al. The management of pregnancy and pregnancy-related medical conditions in pulmonary arterial hypertension patients. Int J Clin Pract Suppl 2011; 175: 6–14
2. Meah VL, Cockcroft JR, Backx K, et al. Cardiac output and related haemodynamics during pregnancy: a series of meta-analyses. Heart 2016;102:518–526
3. Olsson KM, Channick R. Pregnancy in pulmonary arterial hypertension. Eur Respir Rev. 2016 Dec;25(142):431-437
4. Thomas et al. Pulmonary Hypertension and Patient Outcomes: Insights from the National Patient Sample. Journal of the American Heart Association..2017;6:e006144. DOI: 10.1161/JAHA.117.006144
5. Vaidy A, Vaidya A. Pulmonary arterial hypertension in pregnancy. Curr Opin Cardiol. 2023 May 1;38(3):250-256