

INTRODUCTION

Primary spontaneous pneumothorax (PSP) defined as air in the pleural space in absence of underlying lung disease^[1]. Respiratory infection, asthma, H/O previous pneumothorax, hyperemesis, & cocaine use are potential risk factors of pneumothorax in pregnancy. It is a rare condition with serious risks to the mother& fetus, so rapid recognition& treatment are essential. The ventilation impairment in the gravid state causes severe hypoxia, causing decreased maternal partial pressure of oxygen, affecting fetal oxygenation leading to fetal distress & potential fetal loss^[3]. Since few cases has been described (<100)^[2], symptoms of dyspnea & sudden chest pain can be easily misdiagnosed.

AIMS / OBJECTIVES

To describe a case of a pregnant patient with PSP, managed with chest tube drainage and the outcome of the pregnancy.

MATERIALS / METHODS

A 20Y old G2P1L1, prev NVD with 8th month (35w1d) GA, un-booked case of ASRAM, non-smoker, referred from Private hospital I/v/o Chest X-ray showing Right pneumothorax, with underlying lung collapse. Patient had C/o Shortness of breath for 1week with no prior H/o respiratory pathology/trauma. On examination, general condition is fair, RR: 20/min, SpO₂: 93% @ R.A. Other vitals are normal. At the time of admission, RS: Rt. BS decreased in infra scapular, infra-axillary areas. No foetal distress. USG Chest s/o Large Right-side pneumothorax. Tube thoracostomy (ICD) was done.



Before ICD insertion



After ICD insertion

RESULTS

ICD insertion at 35w3d GA, kept on Broad spectrum antibiotics. Primary emergency LSCS + B/L Tubal ligation done under spinal anesthesia i/v/o fetal distress at 36w6d GA.POD 3: CT Chest- subsegmental atelectasis with adjacent consolidation- posterior basal segment of right lower lobe with ICD insitu. ICD was removed 3 weeks postpartum without any complications.

DISCUSSION

Spontaneous pneumothorax is presence of air in the pleural space, in absence of an external event, & any underlying lung disease, resulting from a previously unidentified bleb or bullae. Chest radiographs- to confirm diagnosis. ICD for PSP in pregnancy is safe. Vaginal delivery is not an absolute contraindication, but there is 30-40% chance of recurrence ^{[1][2]} due to the expulsive efforts in 2nd stage of labor. Operative vaginal delivery may be recommended to prevent increased intrathoracic pressure.

CONCLUSION

PSP in pregnancy is a rare (1.2 - 6 in 100,000 women) ^[1], life-threatening complication. Management of pregnancy is based on a risk benefit ratio for the mother & fetus. Early diagnosis & appropriate counseling of the pregnant patient regarding the radiation exposure. Treatment: conservative or surgical intervention.

REFERENCES

1. Treatment of Primary Pneumothorax in Pregnancy With Thoracostomy Tube and Video-Assisted Thoracoscopic Surgery by S Thai et. Al, 2024 Journal of Clinical Gynecology and Obstetrics, ISSN 1927-1271
- 2..Primary spontaneous pneumothorax during pregnancy: A case report and review of the literature, MC Cardoso, et.al Revista Española de Anestesiología y Reanimación, Volume 69, Issue 8, October 2022.
3. Management of Spontaneous Pneumothorax in Pregnancy in a Low-Income Country During COVID-19 Pandemic, Akanni et al Nigerian Journal of Medicine.May–Jun 2021.

ACKNOWLEDGMENT

1. Dr. K. Vandana (Prof & HoD of OBG, ASRAM, Eluru)
2. Dr. K. Sri Tanaya (Prof of OBG, ASRAM, Eluru)
3. Dr. Neeharika (Assoc. Prof of Pulmonogy, ASRAM, Eluru)