Subcutaneous Pneumomediastinum & Subcutaneous Emphysema following Vaginal Delivery : A Case Report

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Background

Spontaneous pneumomediastinum (SPM) and subcutaneous emphysema, clinically recognized as Hamman's Syndrome, constitutes an exceptionally rare peripartum phenomenon, occurring in approximately **1 in 100,000 vaginal deliveries**.[2].

Case

22-year-old low-risk primigravida presented with spontaneous rupture of membranes at 40 weeks. Active labour lasted 3 hours 34 minutes. Thirty minutes postpartum she developed:

- chest pain
- shortness of breath
- sensation of "bubbles popping"

Exam findings:

- vitals normal
- crepitus in temporal region, neck, anterior chest
- clear chest on auscultation

Management was conservative with simple analgesia. She remained stable and was discharged on day 3 postpartum.

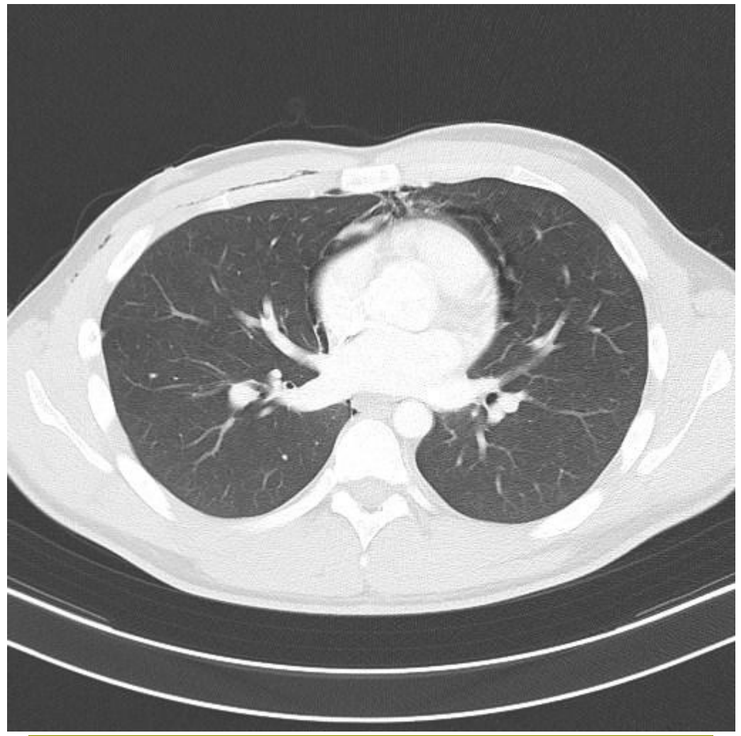

Figure 1 Axial CT: Pneumomediastinum with gas tracking into the base of the neck, both supraclavicular fossae, the right axilla and down the anterior chest wall [5].

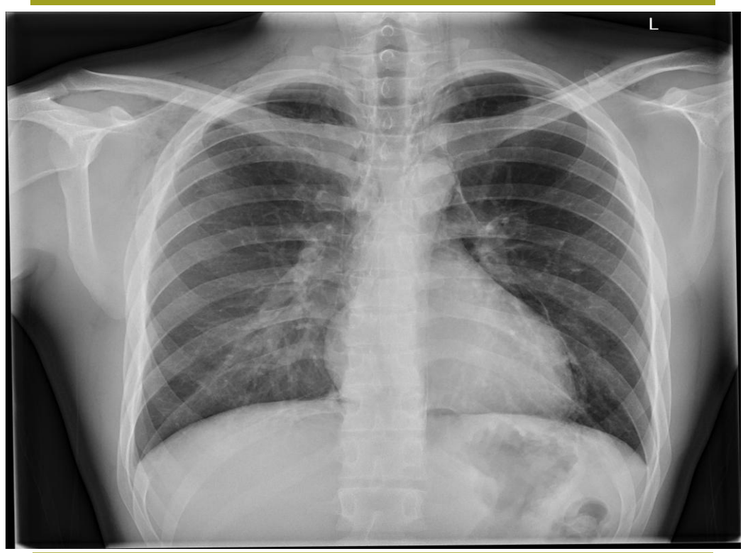

Figure 2 XRAY: There is a moderate pneumomediastinum with evidence of subcutaneous emphysema involving the supraclavicular fossae bilaterally. No pneumothorax. The lungs and pleural spaces are clear [5].

Discussion

SPM results from increased intrathoracic pressure during Valsalva, causing air to dissect into the mediastinum.

Subcutaneous emphysema occurs when air escapes into cervical fascial planes[4].

In literature, 95% of women were primiparous and labor of normal duration[4, 6]. Clinical features include chest pain, dyspnoea and, skin crepitation which, typically manifests in 2nd stage of labor or postpartum period.

It is essential to rule out other life-threatening conditions like pulmonary embolism, aortic dissection, myocardial infarction.

Management is conservative.

References

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6.Berdai, M.A., et al., *Spontaneous Pneumomediastinum in Labor.* Case Rep Obstet Gynecol, 2017. **2017**: p. 6235076.

RANZCOG Regional SYMPOSIUM 2026 Western Australia