CATAMENIAL PNEUMOTHORAX: A RARE CAUSE OF BREATHLESSNESS IN EMERGENCY DEPARTMENT.

92

Atiqah Sulaiman¹, Faiz Baherin¹

¹Hospital Raja Permaisuri Bainun, Perak, Malaysia.



INTRODUCTION

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Pneumothorax is a condition caused by an accumulation of air in the pleural cavity. The word "catamenia" is originally from the Greek word meaning "monthly". Catamenial pneumothorax (CP) is a rare condition that involves endometriosis of the diaphragm, lung, or pleura.

2 CASE REPORT

- A 19-year-old lady presented to the emergency department with progressively worsening breathlessness which was associated with central chest pain that radiates to the right scapula.
- She is a non-smoker. She denied any history of trauma prior, and this is the first time she had these symptoms.
- She was on day-2 menses. She mentions that she had menorrhagia and dysmenorrhea for few years.
- On examination, she was tachypneic. The vital signs are as follows: blood pressure 130/87 mmHg, pulse rate 122 beats /minute, oxygen saturation 98% on air, and respiratory rate of 26 breaths/minute. COVID RTK antigen was negative.
- Chest examination revealed a central trachea, resonant on percussion, and reduced air entry throughout the right side.
- Bedside lung ultrasound showed negative for the sliding sign but no lung point. Chest radiograph showed a right-sided pneumothorax.
- A chest drain was inserted, and a repeated chest x-ray showed persistence of right-sided pneumothorax with non-expandable lung.
- Proceed with high-resolution computed tomography (HRCT) of the thorax and revealed large pneumothorax over the right side, no bronchoalveolar fistula, small defect seen at the wall of bulla at the apical region of right upper lobe suspicious of the ruptured bulla.

DISCUSSION

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- CP is defined as recurrent spontaneous pneumothorax occurring within 72 hours before or after the onset of menstruation.
- The pathological process of CP remains poorly understood. Several hypotheses have been proposed including the spontaneous rupture of blebs, the alveolar rupture caused by prostaglandin-induced bronchiolar constriction, and the sloughing of endometrial implants of visceral pleura with subsequent air leak.
- The right side is affected in the majority of cases (95%) and it is cyclic.
- Long-term management involves the use of oral contraceptives that suppress ovulation.
- This case highlights the need for a high index of suspicion of CP in menstruating women with a spontaneous pneumothorax.



Fig.1: Chest X-Ray showed pneumothorax and shift of mediastinum towards the opposite side

4 REFERENCES

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