

**PP56 CATAMENIAL
PNEUMOTHORAX: A RARE CAUSE
OF BREATHLESSNESS IN
EMERGENCY DEPARTMENT**

ATIQA H SULAIMAN¹, FAIZ BAHERIN²

^{1,2}*HOSPITAL RAJA PERMAISURI BAINUN,
PERAK, MALAYSIA*

Pneumothorax is a condition caused by an accumulation of air in the pleural cavity. Catamenial pneumothorax (CP) is a rare condition that presents as recurrent pneumothorax in menstruating women. It is hypothesized to be attributable to endometriosis of the diaphragm, lung, or pleura.

We report a rare case of 19-year-old lady who presented to the emergency department (ED) with progressively worsening breathlessness which was associated with central chest pain. She was on day-2 of menses and further gynecological history revealed that she had menorrhagia and dysmenorrhea for a few years. Upon presentation, she was tachypneic with a respiratory rate of 26 breaths/minute but saturated well with SPO₂ of 98% under room air. She had a normal blood pressure of 130/87 mmHg but was tachycardic with a pulse rate of 122 beats /minute. Respiratory system examination revealed a central trachea, right lung hyper resonance, and reduced air entry on the right chest. Bedside lung ultrasound showed no sliding sign and chest radiography revealed a right-sided pneumothorax. A chest drain was promptly inserted, and a post-procedural chest x-ray revealed persistent pneumothorax. High-resolution computed tomography of the thorax was carried out and revealed a large pneumothorax over the right side with no

bronchoalveolar fistula. The patient was referred to the cardiothoracic surgery department and pleuroscopy was carried out. The patient was discharged well and was given an appointment to review histopathological examination findings.

CP is defined as recurrent spontaneous pneumothorax occurring within 72 hours before or after the onset of menstruation. Diagnosed mainly by medical history, endometriosis-related-pneumothorax diagnosis is made by intraoperative visual inspection and appropriate histological examination. The pathological process of CP remains poorly understood. Several hypotheses have been proposed including spontaneous rupture of blebs, prostaglandin-induced alveolar, and sloughing of endometrial implants of visceral pleura. 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 sudden onset of breathlessness in the ED.

KEYWORD: Catamenial, Pneumothorax, Endometriosis