SPONTANEOUS MASSIVE HEMOPNEUMOTHORAX: A RARE CAUSE OF ACUTE DYSPNEA AND BACK PAIN IN A YOUNG PATIENT.

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Introduction
Spontaneous Hemopneumothorax (SHP) is a rare clinical entity but potentially life-threatening event following the tearing of a vessel in a patient with spontaneous pneumothorax due to various aetiology. The clinical presentation is variable but may lead to rapid progression of chest pain, dyspnoea, hemodynamic instability, and hypovolemic shock.

Case Description
A 22-year-old, healthy gentleman presented to our Emergency Department with unprovoked, sudden onset tearing back pain followed by dyspnea that gradually worsened within 12 hours. Upon examination, he appeared septic but hemodynamically stable. He was tachypneic with a respiratory rate of 30 breaths per minute and an oxygen saturation of 90% under room air and, therefore, put on high flow nasal cannula. His chest examination revealed reduced breath sounds over the left hemithorax with no stony dullness or hyperresonance upon percussion. Chest X-ray (CXR) showed left-sided hydropneumothorax. Bedside ultrasound revealed massive left pleural effusion of mixed echogenicity and absence of lung sliding sign. A diagnostic thoracentesis was performed, which drained fresh blood and therefore chest tube was not inserted. Computed tomography angiography (CTA) of the thorax demonstrates venous bleeding within the left upper lung lobe and gross left hemopneumothorax.

Discussion
SHP complicates 1-12% of patients who present with spontaneous pneumothorax and mostly occurs in the young male population. Diagnostic thoracentesis is helpful in narrowing the diagnosis. Treatment should be aimed at improving the hemodynamics, relieving the obstruction, and hemorrhage control. Insertion of chest tube may be required in rapidly deteriorating patients but may disrupt the clotting process at the torn vessel. Hence, early surgical intervention with either thoracotomy or video-assisted thoracic surgery (VATS) should be performed. Conservative treatment may be considered in selected and stable patients.

Conclusion
SHP should be suspected in patients with hydropneumothorax who presented with acute onset unprovoked back pain and dyspnea. A diagnostic thoracentesis may be considered prior to chest tube insertion as the patient may warrant urgent CTA of the thorax and early referral to the cardiothoracic team for surgical intervention.

Keywords
Spontaneous hemopneumothorax, spontaneous pneumothorax, massive hemothorax.