Letters to the Editor

Spontaneous Haemo-pneumothorax
A Rare but Life-threatening Phenomenon

The Editor

Sir,

Spontaneous haemo-pneumothorax (SHP), although a well documented entity, is encountered infrequently in clinical practice. It is reported to occur in 1%–12% of all cases of spontaneous pneumothorax (1, 2). This condition is characterized by the accumulation of air and blood in the pleural cavity, not preceded by trauma. The clinical picture is of a dramatic progression of symptoms that may be life-threatening. Whittaker was the first to report a patient who was successfully treated by aspiration (3). This case illustrates the importance of early recognition, close monitoring and resuscitation, as well as early thoracotomy.

A 59 year-old man presented with a two day history of sudden onset of left pleuritic chest pain. On physical examination the patient was alert but dyspnoeic. The blood pressure was 140/100 mmHg; pulse rate was 130/min and oxygen saturation was 97% on room air. There was decreased air entry and breath sounds, as well as a resonant percussion note over the entire left chest. Chest X-ray demonstrated a left-sided pneumothorax with a shift of the mediastinal structures to the right side, suggesting an element of tension despite the absence of other clinical signs of tension pneumothorax. The left costophrenic angle was blunted, indicating the presence of an intra-pleural fluid collection (Figure). A basal tube thoracostomy drained 300 ml of fresh blood. The chest X-ray taken after the insertion of the chest drain showed partial re-expansion of the left lung.

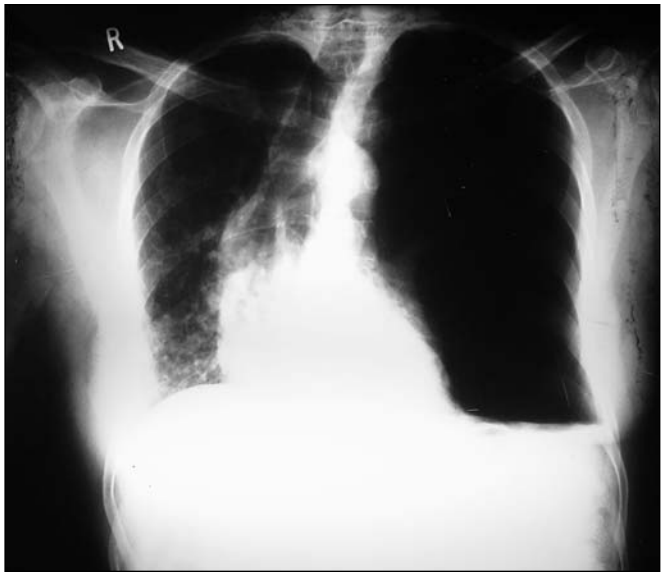

Fig.: Chest X-ray showing left spontaneous (tension) haemo-pneumothorax.

Within the next 24 hours, the tube drained a total of 1500 mls of blood and there was a fall in his haemoglobin from 14.3 g/dl to 11.8 g/dl. In view of the sustained haemorrhage, thoracotomy was performed.

During the operation, 900 ml of clotted blood was found inside the left pleural cavity. The entire left lung was emphysematous with multiple small and medium size bullae. There was a 6 cm x 3 cm ruptured bullae in the anterior segment of the left upper lobe. This was partially excised and oversewn with 2/0 chromic suture. Abrasive pleurodesis was performed. The postoperative period was uneventful.

Spontaneous haemo-pneumothorax, although a well documented disorder, is a condition that is rarely encountered in clinical practice (4). In a review by Fry, the incidence of SHP was found to be thirty times higher for male than for female patients, a difference in incidence between men and women for spontaneous pneumothorax (5). Primary spontaneous pneumothoroax has an estimated incidence of between 7.4 and 18 cases per 1000 population per year among men and between 1.2 and 6 cases per 100 000 population per year among women (6). In the Jamaican population, 2% to 6% of cases of spontaneous pneumothorax in females of reproductive age may have an associated spontaneous haemothorax due to pleural endometriosis (7).

The need for vigilance and early recognition is crucial. Early intervention not only leads to shorter hospitalization but also confers better long term results.

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