X-ray Quiz

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Case history

JY is a healthy 17 years old boy who presented to our emergency department with sudden onset of left sided chest pain while sleeping, accompanied by shortness of breath. He had no recent history of fever, cough or trauma. No asthma or abnormal bleeding tendency was known. A Chest X-ray was taken.

Question
1. What is the diagnosis?
2. What is the treatment?

(Answer on page 24)
Changing prevalence of allergic diseases in the Asia-Pacific region

Adenovirus respiratory infection in hospitalized children in Hong Kong: serotype-clinical syndrome association and risk factors for lower respiratory tract infection

Recent advances in asthma biomarker research

Severe respiratory syndromes: Travel history matters.

Relationship between passive smoking exposure and urinary heavy metals and lung functions in preschool children

Effects of passive smoking on snoring in preschool children

Respiratory viruses and atypical bacteria triggering severe asthma exacerbation in children

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### Coming HKSPR Meetings and Workshops

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**Answers to X-ray Quiz on page 23**

**Spontaneous haemopneumothorax.**

JY had chest drain inserted after admission. However there was persistent haemothorax and haemoglobin dropped from 14 to 11. Video assisted thoracoscopic surgery (VATS) was done the next day and 1 litre of blood was drained from the pleural cavity. An apical adhesion band was found but no active bleeding vessel was seen. Adhesion band catheterization, wedge resection of site of air leaking and abrasive pleurodesis was performed. JY recovered uneventfully.

Spontaneous haemopneumothorax can be life-threatening if not treated promptly. It complicates 3-7% of spontaneous pneumothorax and occurs mostly in young male patients aged between 20-34 years-old. Although spontaneous pneumothorax is often accompanied by a limited amount of blood in the pleural space, spontaneous haemopneumothorax is diagnosed when more than 400 ml of blood has accumulated in the pleural cavity in association with spontaneous pneumothorax. The most common presenting symptoms are chest pain and shortness of breath. Bleeding can be from ruptured pleural adhesion with aberrant vessel or from a ruptured vascular bulla. Chest X-ray will show pneumothorax with fluid level and thoracentesis shows frank blood or haemacrit of the pleural fluid being greater than 50% of the peripheral blood. Patients can have sudden severe bleeding and die of hypovolaemia and shock. Treatment is immediate volume and blood replacement as indicated and placement of large bore chest drain. Early surgical intervention (VATS or open thoracotomy) should be undertaken if there is persistent bleeding.

**References**