A pneumothorax? When to look twice and treat once

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DESCRIPTION

A large hiatus hernia in the thoracic cavity is rare but can result in respiratory symptoms and signs such as shortness of breath, unilateral reduced breath sounds and even respiratory failure. This condition, also known as gastrothorax,[1] can sometimes be very challenging to diagnose due to its resemblance with pneumothorax. Few cases[2 3] have been reported when gastrothorax has been mistakenly identified as pneumothorax and attempts have been made for aspiration of air, resulting in stomach perforation.

We present a case of a 57-year-old man who was referred to the on-call medical team by Accident & Emergency department with shortness of breath of 1-week duration. When he was reviewed by the medical team, the clinical examination showed reduced breath sounds on the right side. He was gradually becoming more hypoxic requiring 35% oxygen via venturi mask. An urgent chest X-ray was therefore performed, and the radiographer on call phoned the ward immediately and informed the medical team that there was a pneumothorax on the X-ray which potentially needs urgent chest tube insertion (figure 1).

The chest X-ray was reviewed by the medical team, but it was felt that the chest X-ray images were not typical of a pneumothorax or haemopneumothorax, and since the patient's oxygen saturations were stable at that point, a decision was made to perform an urgent CT scan of the chest first before draining the pneumothorax.

The CT scan showed a very large hiatus hernia with most of the stomach in the right hemithorax, with mediastinal shift, and no evidence of a pneumothorax (figure 2). A nasogastric tube was subsequently passed and approximately 750 mL of fluid

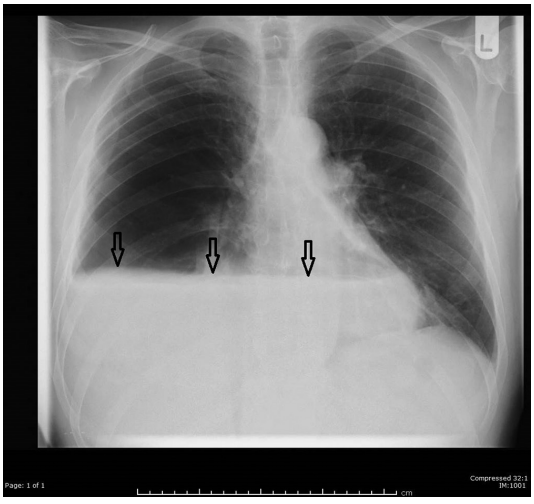

Figure 1 Chest X-ray. Arrows mark the air fluid level in the stomach.

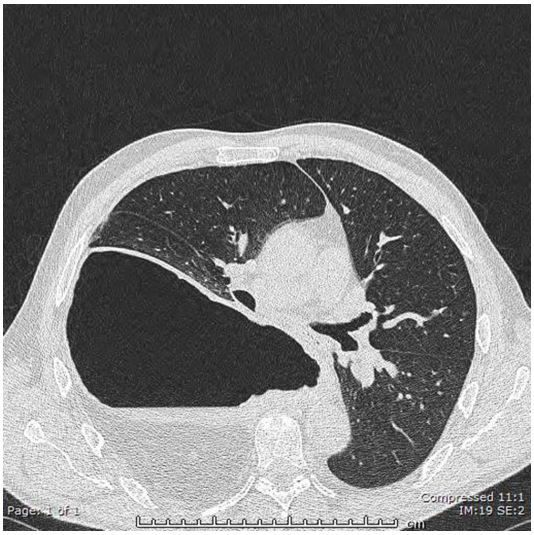

Figure 2 CT scan of the chest.

Patient's perspective

My wife found me unwell on returning home from a night shift. My general practitioner was called and telephoned for an ambulance. I was taken to Bassetlaw Hospital.

I was examined and given a chest X-ray. I was given very little information about my condition. I deteriorated overnight and was then given a CT scan. The images were sent to the thoracic team at Northern General Hospital, Sheffield. The team agreed to do the surgery that evening. I was taken straight to the hospital where the team were waiting. That is when I and my family found out how serious my condition was. I was taken straight to the theatre. I was there all night and all I can say is I feel very lucky to have had the surgeons Mr Edwards and Mr Wyman along with an amazing team.

My family and I can't thank them enough.

Learning points

- Gastrothorax can present with signs and symptoms resembling pneumothorax.
- Diagnosis of gastrothorax should be considered, especially in patients who have a prior history of a hiatus hernia.

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was aspirated. The patient was then referred and transferred to thoracic surgery for further management.

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