

Figure 1 Spiral computed tomography of the chest following angiography.

subclavian arteries may lead to variation in blood pressure between the right and left arms.¹ This is an invaluable physical sign, which may be missed or ignored. Pulse deficits or absences occur in 50% of patients with proximal aortic dissection, the brachiocephalic artery being more commonly affected.¹ This was not detected in our patient although the dissection occurred proximal to the origin of the common brachiocephalic artery.

Although our patient remained hemodynamically stable preoperatively, the poor operative outcome was consistent with a recent finding of Okita *et al*,⁸ who reported poor operative outcome in patients over 70 years of age compared with those under 70, especially when operated on as an emergency, and in those with preoperative vital organ damage.

Finally our patient was thought to have pulmonary embolism from his clinical presentation, but a V/Q scan

was negative. A case of aortic dissection reported by Stollberger *et al* had a decrease in perfusion on V/Q scan.⁹

Conclusions

This case highlights the need to consider aortic dissection as a cause of atypical chest pain. This condition may simulate other pulmonary diseases such as pneumonia or pulmonary embolism.

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Pneumomediastinum secondary to an apparently trivial stab wound to the neck: the value of the Hamman's sign and thorough radiological investigation

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Perforation of the pharynx and upper oesophagus after stab wounds to the neck is easily overlooked because of the relative lack of symptoms. A case is reported in which pneumomediastinum occurred after an apparently trivial neck wound.

perforation of the pharynx and upper oesophagus is reported to be relatively high,¹ it is considered infrequently and can easily be overlooked because of the relative lack of symptoms, as demonstrated in this case.

CASE REPORT

A 25 year old man presented to the A&E department after having been stabbed in the left posterior triangle of the neck with a stiletto knife. Despite this, he was well and observations on admission—including pulse, blood pressure, and respiratory rate—were all normal and remained stable,

injury to the airway and the major vessels naturally dominates the management in cases of penetrating trauma to the neck. Although the incidence of associated

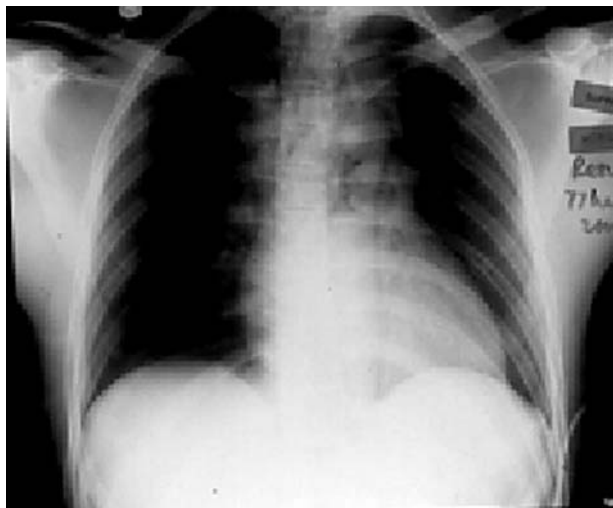


Figure 1 Chest x ray showing extensive pneumomediastinum and Naclerio's V sign.



Figure 2 Lateral soft tissue x ray of the neck showing an extensive pocket of retropharyngeal air.

with no sign of any respiratory distress or injury to major vessels. The presence of mild localised surgical emphysema in the posterior triangle was confirmed but there was no evidence of internal injury to the pharynx or larynx or any air escape from the neck wound on respiration. Although

clinical examination of the chest did not show any of the usual signs of pneumothorax, auscultation revealed a positive Hamman's sign. This is characterised by a peculiar crunching, bubbling, popping, or crackling sound that varies with the phase of the cardiac cycle and is best heard in the left lateral decubitus position. A positive Hamman's sign usually indicates the presence of a pneumomediastinum but may also be associated with an isolated pneumothorax.²

The presence of this sign prompted a chest x ray (fig 1). This not only showed the expected subcutaneous emphysema in the soft tissues of the neck, but also the presence of air in the mediastinum outlining the whole of the descending aorta and the superior surface of the diaphragm. At the junction of these two structures, the air formed a "V" previously described as Naclerio's V sign.³ A lateral soft tissue x ray of the neck (fig 2) also showed a large amount of retropharyngeal air, indicating a possible perforation of the pharynx or upper oesophagus, though a subsequent contrast swallow could not demonstrate this. As a result, and because the patient's condition was stable, he was treated conservatively with prophylactic wide spectrum antibiotics. Sequential chest x rays showed a gradual uncomplicated resolution of the mediastinal air and surgical emphysema, which had completely disappeared after six days, when the patient was discharged home well.

COMMENT

Unsuspected and undiagnosed perforation of the upper aerodigestive tract may have serious consequences and may even lead to death from advanced mediastinitis. Such events might be avoided by early identification of a perforated viscus and if a significant defect had been identified surgical closure to avoid further complications would have been indicated. Early diagnosis has been reported to reduce the associated mortality from 85.7% to 50%.⁴ Routine radiological investigations—including a lateral soft tissue x ray of the neck, chest x ray, and barium swallow—are recommended in all cases of penetrating neck injury.

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