EMERGENCY CASEBOOK

"Punk" rock can be bad for you: a case of surgical emphysema from a "punk" rocker's leather jacket

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Emerg Med J 2006;23:e35 (<http://www.emjonline.com/cgi/content/full/23/6/e35>). doi: 10.1136/emj.2005.033100

Stab wounds to the thorax are seen in the emergency department (ED) and can be caused by a variety of mechanisms. This case highlights an unusual cause of injury: a leather jacket with spikes on the back of it. This type of jacket is often worn by "punks" as a fashion statement. We report that falling onto such a jacket may result in accidental thoracic injury leading to subcutaneous emphysema. A thorough clinical assessment is mandatory to exclude underlying lung injury or pneumothorax. In patients with subcutaneous emphysema and an otherwise normal chest radiograph, an in hospital observation period of 24 hours to check for any delayed complications is adequate if the patient remains clinically stable.

Stab wounds to the thorax are commonly seen in the emergency department (ED) and can be caused by a variety of mechanisms.¹⁻⁴ This case highlights an as yet unreported cause of injury: a leather jacket with spikes on the back of it. This type of jacket is often worn by "punks" as a fashion statement but it is shown here that accidental thoracic injury leading to subcutaneous surgical emphysema can occur.

CASE REPORT

A 19 year old male student presented to the ED 15 hours after suffering an injury to what he thought was his right shoulder. He was concerned that it might interfere with his physical fitness regimen. While dancing at a nightclub 15 hours earlier, the patient was accidentally pushed in the back and fell forwards, landing on a 40–50 mm spike extending from the leather jacket of the partygoer in front of him. The spike punctured his skin in the region of his anterior right shoulder. As he was intoxicated at the time, the patient pulled himself off the spike and carried on with his enjoyment of the music. He awoke the following morning and noted the wound, and presented to ED as he felt a sensation of "fluid in his chest" after the injury.

On arrival in the ED there was no evidence of respiratory distress. Vital signs, including respiratory rate, were within normal limits. An 8×3 mm puncture wound was noted 20 mm below the right clavicle in the second intercostal space (fig 1A). It was not bubbling. Surgical emphysema was felt around the wound and extending down over his right pectoralis major muscle. Respiratory examination revealed symmetrical air entry on auscultation and normal percussion note over his chest wall. There was no evidence of injury to the right shoulder. Chest x ray (CXR) scanning confirmed the presence of surgical emphysema over the right axilla and supraclavicular region. There was no evidence of pneumothorax on the CXR (fig 1B, C). Thoracic CT scan was not

Abbreviations: CXR, chest x ray; ED, emergency department

Figure 1 (A) Puncture wound below the right clavicle; (B) chest radiographs; (C) chest radiograph apical view.

performed, as the patient was clinically stable. He was admitted for 24 hours' observation. Serial CXRs revealed no progress of the surgical emphysema or development of pneumothorax. The patient was discharged clinically well the following day. He had no further complications on follow up.

DISCUSSION

Thoracic stab wounds are commonly seen in the ED and can be caused by a variety of objects.¹⁻⁶ This case highlights the fact that complications of apparently simple thoracic wounds may result in significant chest trauma and serves as a warning never to underestimate injuries that at first appear trivial.²⁻³ In our case, sustaining a stab wound from a punk jacket while dancing presents an unusual mechanism of thoracic injury. Penetrating chest injuries with small haemopneumothoraces on the initial have required subsequent intercostal catheter insertion in up to 21% of cases.¹ Similarly, delayed development of pneumothorax has been noted more than 24 hours after stab wounds to the thorax.¹⁻³ Our patient was admitted for observation. No chest drain was inserted as he was clinically well 15 hours after the injury and there was no pneumothorax on his initial CXR. Serial CXRs were performed 6 and 22 hours post-admission and there was no change in clinical symptoms or CXR appearance during the observation period. In patients with similar presentations to our case, it is likely that a 24 hour observation period would be sufficient to exclude evolving injury if the patient remains clinically stable and has no evidence of pneumothorax on the serial CXR examinations.¹

ACKNOWLEDGEMENTS

Many thanks to the clerical staff for supplying notes and the medical illustration department of the hospital for supplying radiographs.

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Competing interests: there are no competing interests.

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Accepted for publication 9 January 2006

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