Original article

- Huang ZC, Xue D, Preston E, et al. Biphasic opening of the blood-brain barrier following transient focal ischemia: effects of hypothermia. Can J Neurol Sci 1999;26:298–304.
- Morimoto Y, Kemmotsu O, Kitami K, et al. Acute brain swelling after out-ofhospital cardiac arrest: pathogenesis and outcome. Crit Care Med 1993;21: 104–10.
- Schmoker JD, Shackford SR, Wald SL, et al. An analysis of the relationship between fluid and sodium administration and intracranial pressure after head injury. J Trauma 1992;33:476–81.

Images in emergency medicine

Bilateral tension pneumothorax

A 24-year-old woman was transferred from an outpatient surgery centre by the paramedic service. During surgery for bilateral augmentation mammoplasty (*) sudden hypoxaemia developed with oxygen saturation decreasing to 58% and drop of blood pressure from 130/95 to 78/61 mm Hg (systolic/diastolic). Due to diminished breath sounds a chest tube was placed on each side and the patient immediately referred to the emergency room. Chest x-ray on admission revealed bilateral tension pneumothorax with both lungs entirely collapsed (figure 1A). The heart silhouette appeared compressed and depression of both diaphragms (\succ) was observed, corresponding to a 'deep sulcus sign'. Due to bilateral pathology no significant shift of the mediastinum was present. After placement of additional chest tubes (\rightarrow) the pneumothorax resolved on both sides (figure 1B). Immediate follow-up CT demonstrated air entrapment in the

- 22. Penney DJ, Stewart AH, Parr MJ. Prognostic outcome indicators following hanging injuries. *Resuscitation* 2002;54:27–9.
- Matsuyama T, Okuchi K, Seki T, et al. Prognostic factors in hanging injuries. Am J Emerg Med 2004;22:207–10.
- Marik PE, Varon J. Prolonged and profound therapeutic hypothermia for the treatment of "brain death" after a suicidal intoxication. Challenging conventional wisdoms. Am J Emerg Med 2010;28:258, e1-4.
- McIntyre LA, Fergusson DA, Hebert PC, et al. Prolonged therapeutic hypothermia after traumatic brain injury in adults: a systematic review. JAMA 2003;289:2992–9.

right breast implant (dotted \rightarrow) as a sign for rupture due to rough surgical handling (figure 1C).

Moritz Wildgruber, Ernst J Rummeny

Department of Radiology, Technische Universität München, München, Germany

Correspondence to Dr Moritz Wildgruber, Department of Radiology, Technische Universität München, Ismaninger Strasse 22, 81675 München, Germany; moritz.wildgruber@tum.de

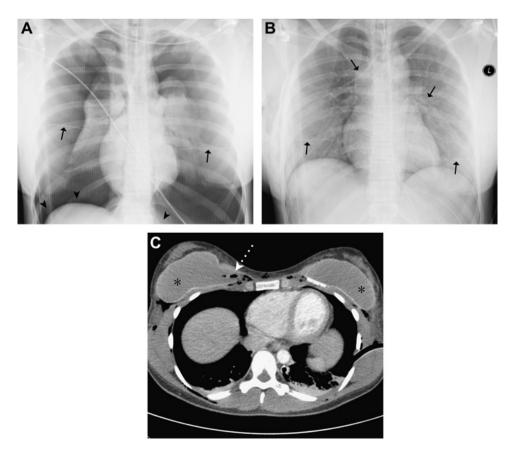
Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

Accepted 27 January 2012 Published Online First 19 February 2012

Emerg Med J 2012;29:752. doi:10.1136/emermed-2012-201155

Figure 1 x-Ray images before (A) and after placement (B) of the chest tubes. (C) transverse CT Scan at the level of the heart, similarly after placement of the chest tubes.





Bilateral tension pneumothorax

Moritz Wildgruber and Ernst J Rummeny

Emerg Med J 2012 29: 752 originally published online February 19, 2012 doi: 10.1136/emermed-2012-201155

Updated information and services can be found at: http://emj.bmj.com/content/29/9/752

These	incl	ude:

Email alerting service Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Articles on similar topics can be found in the following collection	15
Collections Resuscitation (593) Ethics (391) Clinical diagnostic tests (1045) Hypertension (285) Radiology (991) Radiology (diagnostics) (895)	

Notes

To request permissions go to: http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to: http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to: http://group.bmj.com/subscribe/