

INTERESTING IMAGES

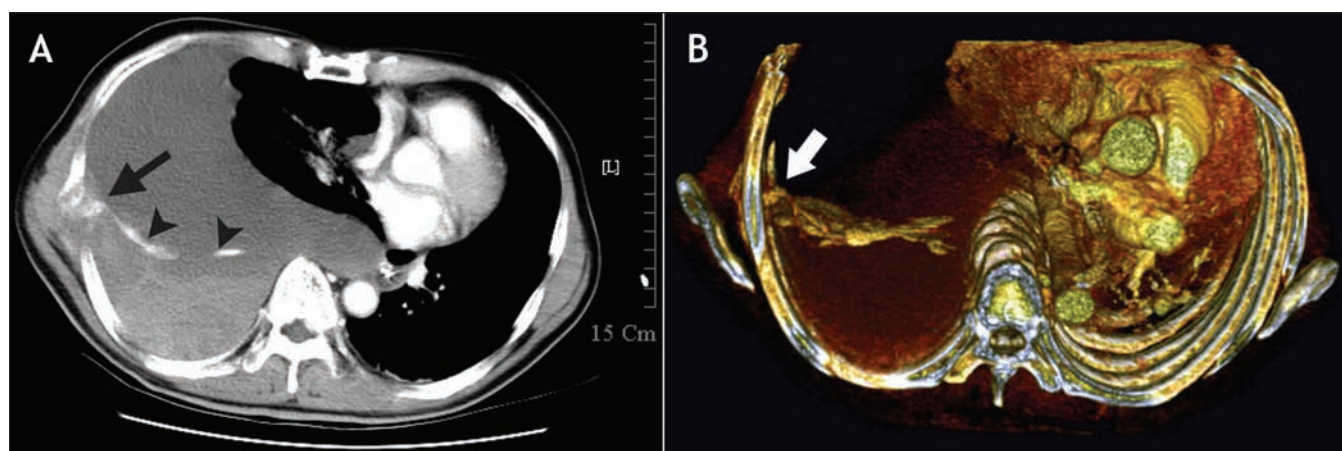


Figure 1: A: Chest computed tomography scan with contrast showing extravasation of the contrast medium (arrow) from a rib tumour and a sheet (arrowheads) separating different density pleural fluids. B: Coloured 3-dimensional reconstruction of the computed tomography scan showing the bleeding site (arrow).

Spontaneous hemothorax caused by metastasis of a rib tumour

A 62-year-old man with a history of hepatocellular carcinoma presented to the emergency department with sudden onset of chest pain on his right side, dyspnea and syncope. A chest computed tomography scan with contrast showed active extravasation of the contrast medium from a rib tumour, forming a sheet separating pleural fluids of 2 different densities (Figure 1A). A coloured 3-dimensional reconstruction of the computed tomography scan showed the bleeding site (Figure 1B). Bone-window and pre-contrast views confirmed that the higher-density material was contrast agent (Appendix 1, available online at www.cmaj.ca/cgi/content/full/178/6/679/DC1). Thoracocentesis yielded a bloody effusion, which confirmed the diagnosis of a hemothorax. The most common cause of hemothorax is trauma. Spontaneous hemothorax can be caused by a primary or metastatic neoplasm, aortic dissection, coagulation disorders, endometriosis and pulmonary infarction. Hemoperitoneum caused by a ruptured primary tumour is a well-known presentation of hepatocellular carcinoma; however, hemothorax caused by the rupture of a metastatic hepatocellular carcinoma is very rare. Treatment options for spontaneous hemothorax because of metastasis of a rib tumour include tube thoracotomy, surgical hemostasis, transcatheter arterial embolization and percutaneous ethanol injection. However, as in our case, most patients die as a result of uncontrollable hemorrhage.

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