described, although the pneumoperitoneum was not under tension in either case. In both, lung disease was present and the patients required mechanical ventilation with high inspiratory pressures. Tension pneumoperitoneum can also develop without positive pressure ventilation from perforation of abdominal viscera. 7–10

Possible mechanisms for air entering the peritoneal space from the pleural space have been described previously.11 12 Air may leak through the alveolar walls during high pressure ventilation and thence along the perivascular sheaths to the mediastinum and by the diaphragmatic openings to the retroperitoneal space and the peritoneum. This theory is supported by a recent report of pneumoretroperitoneum in a low birthweight infant associated with tension pneumothorax.13 There may alternatively be direct communication between the peritoneal and pleural spaces through diaphragmatic defects, which may be congenital or traumatic. A large increase in the intra-abdominal pressure, caused by tension pneumoperitoneum, as well as raising the diaphragm and causing respiratory embarrassment, can compress the inferior vena cava, causing diminished venous return, reduced cardiac output, and lowered mean arterial blood pressure. This increase in intra-abdominal pressure can high enough to compress the aorta.8 The clinical signs of respiratory embarrassment, abdominal distension, and possibly cyanosis in a patient with high ventilatory pressures may be an indication of raised intra-abdominal pressure. In an emergency situation, consideration should be given to decompression of the peritoneal cavity by large bore needle, as in the treatment of tension pneumothorax.

Tension pneumoperitoneum occurring in a resuscitation setting, as opposed to that associated with mechanical ventilation on the intensive care unit, has not to our knowledge been described before. Reports confirm that pneumoperitoneum under tension is very rare and appears to require a combination of lung disease and mechanical ventilation with high inspiratory pressures. Most cases of pneumoperitoneum are secondary to anastomotic leakage or previous bowel injury. This may cause a rise in intra-abdominal pressure, especially in the presence of mechanical ventilation.

Tension pneumothorax is a well recognised complication of mechanical ventilation, especially in the presence of pre-existing lung disease. Rapid relief of the raised intrapleural pressure by needle thoracocentesis or tube thoracotomy is life saving. In the case presented, bilateral needle decompression of the chest only partially relieved the respiratory embarrassment. When a needle was inserted into the peritoneal cavity, the ventilatory pressures were markedly reduced.

Patients who develop acute respiratory distress during artificial ventilation should be assessed for signs of air under tension in the chest cavity, but may also have raised intraperitoneal pressure from tension pneumoperitoneum.

Dystonic reactions: two case reports

Gary W Kerr

Abstract

Case reports of dystonic reactions to metoclopramide are presented. Dystonic reactions may occur after ingestion of many drugs and should be considered by accident and emergency staff in patients with a suggestive clinical presentation. (J Accid Emerg Med 1996;13:221–222)

Key terms: dystonic reactions; drug side effects

Dystonic reactions are a well recognised complication of many drugs, 1 2 commonly the antipsychotics and antiemetics. Acute dystonias most commonly affect children and young adults, 1 with the muscles of the head and neck mainly affected. Opiplotonus and torticollis are classical, as are oculogyric crises with painful lateral or vertical deviation of the eyes. Bizarre grimaces, blepharospasm, tongue protrusion, and a subjective feeling of swelling...
Missed cervical spine injury following barflying

M Taylor, A Thomas, A Jackowski

Abstract

The case is reported of a young woman who suffered a wedge fracture of C7 due to axial loading with a flexed spine, in an injury caused by barflying. The fracture was unstable and required surgical stabilisation. In this case the seriousness of the injury was not realised at first.