Surgical emphysema of the orbit associated with pneumoperitoneum

Editor—In a recent article, the combination of patient position and pneumoperitoneum on the physiology of the patient during surgery was discussed.1 We present a case of unusual complication associated with pneumoperitoneum.

A fit and well 45-yr-old lady was listed for elective laparoscopic Nissen fundoplication. After induction of anaesthesia, she had the usual patient protective procedures; eye padding, safe positioning, checking of potential pressure points, etc. She underwent the procedure in a head-up tilt position. The procedure was uneventful from both a surgical and anaesthetic point of view. At the end of the procedure on removing the protective eye pads, it was noted that there was extensive swelling to the left orbit (Fig. 1). There was no history of pressure placed on the orbit intraoperatively and no history of allergy to surgical tape. Palpation revealed crepitus and further palpation in the supraclavicular areas revealed additional crepitus. A chest radiograph showed surgical emphysema with pneumomediastinum, a diagnosis of unilateral surgical emphysema of the orbit secondary to gas insufflation was made.

Surgical emphysema has been reported in patients undergoing laparoscopic Nissen fundoplication, and pneumomediastinum is a recognized side-effect of a pneumoperitoneum.2 Eye injuries during anaesthesia account for a number of claims against anaesthetists but are mostly due to corneal abrasion or eye movement during ophthalmic surgery.3 Cases of surgical emphysema of the orbit typically relate to trauma of the medial wall of the orbit and even secondary to vigorous nose blowing.4

The patient made an uneventful recovery with the emphysema settling quickly. Findings of unexpected injury post-surgery should alert the clinician to potential unusual side-effects; in this case, the pneumomediastinum was not symptomatic.

Conflict of interest

None declared.

J. S. Hartford-Beynon*
S. Kadambande
S. Rassam
Cardiff, UK
*Email: jshartford-beynon@doctors.org.uk

Conservative treatment of non-occlusive mesenteric ischaemia with temporary vacuum-assisted closure therapy

Editor—We report a case where vacuum-assisted closure was useful in the management of a patient with small-bowel ischaemia. A 61-yr-old male, with no significant medical history other than appendectomy 40 yr before, was admitted at the Emergency Department with an acute abdomen with clinical signs of peritonitis, enzyme elevation, and lactic acidosis. A contrast-media CT scan revealed air-fluid levels and mesenteric oedema. The patient was transferred to the operating theatre where a laparotomy revealed ischaemia (bowel wall oedema, discoloration of bowel, absence of peristalsis) of about 90 cm of ileum, caused by strangulation through a peritoneal scar.

After relieving the bowel strangulation, to avoid a large resection of small bowel, the abdomen was left open under sterile cover and negative pressure aspiration to promote reperfusion and oedema drainage. The open-abdomen also allowed a scheduled ‘second look’ after 24 h of monitoring.