### Correspondence

## An unusual presentation of latex allergy

To the Editor:

Since 1989, many cases of allergic reactions to latex have been reported in the literature. We report an allergic reaction to latex during ENT surgery.

A four-year-old boy was admitted for adenoidectomy and insertion of transtympanic drains. His past history included several operations related to a lumbosacral meningomyelocele. No allergic reaction was mentioned in the medical records.

After oral premedication with chloral hydrate and atropine, general anaesthesia was induced with halothane in a mixture of N<sub>2</sub>O and O<sub>2</sub> via the Jackson-Rees modification of the Ayre's T piece. Nasotracheal intubation was carried out under deep general anaesthesia with an uncuffed PVC tube (Portex®). Anaesthesia was maintained with isoflurane in N<sub>2</sub>O-O<sub>2</sub> and ventilation was controlled. Fifteen minutes after the beginning of the procedure, the ENT surgeon noticed oedema of the uvula and asked for corticosteroids (methylprednisolone 25 mg) to be administered iv. The oedema worsened and spread to the soft palate and then to the tongue and lips. There was neither tachycardia nor hypotension but the ventilation pressures increased and the SpO<sub>2</sub> decreased to 94%, auscultation disclosed bilateral expiratory sibilant rales. A provisional diagnosis of anaphylaxis was established: the topography of the oedema and the timing of its occurrence, 15 min after the first contact of the oropharyngeal mucosa with the surgeon's latex gloves, led us to suspect the possibility of reaction to latex occurring in a patient at high risk.<sup>2</sup>

After the injection of small doses of epinephrine and hand-ventilation with oxygen SpO<sub>2</sub> returned to 99%. Since the haemodynamic variables remained stable it was decided to pursue this short-lasting operation. A discrete skin rash appeared 90 min later. At the end of the procedure the patient was transferred to the PICU. Recovery was uneventful. The diagnosis of allergy to latex was confirmed six weeks later by a strongly positive RAST specific for latex.

Although facial angioedema and shortness of breath have already been described in a latex allergic patient reacting to his dentist's gloves,<sup>3</sup> this is the first report of an allergic reaction to latex occurring during ENT surgery.

O. Opsomer MD
M. Van Boven MD
P. Pendeville MD
F. Veyckemans MD
Department of Anaesthesiology
St. Luc Hospital – UCL Medical School
Avenue Hippocrate 10.1821
1200 Brussels – Belgium

#### REFERENCES

- Slater JE. Rubber Anaphylaxis. N Eng J Med 1989; 320: 1126-30.
- 2 Moneret-Vautrin DA, Matta E, Gueant JL, Turgeman D, Laxenaire MC. High risk of anaphylactic shock during surgery for spina bifida. Lancet 1990; 335: 865-66.
- 3 Sussman GL, Tarlo S, Dolovich J. The spectrum of IgE-mediated responses to latex. JAMA 1991; 265: 2844-7.

## Unilateral pneumothorax – an unexpected complication of laparoscopic cholecystectomy

To the Editor:

We would like to report an unexpected complication with laparoscopic cholecystectomy. A 60-yr-old obese lady had general endotracheal anaesthesia for an elective laparoscopic cholecystectomy. During the creation of CO<sub>2</sub> pneumoperitoneum with an automatic Karlstorz apparatus, airway pressure rose suddenly from an initial value of 30 to 50 cm H<sub>2</sub>O and her systolic blood pressure decreased from 140 to 65 mmHg. Oxygen saturation decreased from 99 to 80%. Air entry was markedly reduced over the left chest. The anaesthesia circuit was checked immediately. Inspired oxygen was increased to 100%. Ephedrine, 6 mg was given iv and the pneumoperitoneum released with marked improvement in the patient's condition. A portable chest roentgenogram confirmed a left pneumothorax and a chest tube was inserted.

Once her condition stabilized, it was decided to continue with the procedure. However, upon recreation of the pneumoperitoneum, airway pressure again increased to 45 cm H<sub>2</sub>O and the blood pressure decreased. Gas bubbling from the chest tube increased. The procedure was then converted to an open cholecystectomy.

CORRESPONDENCE 1001

Postoperative CXR showed a reexpanded left lung with considerable atelectasis. She improved with oxygen therapy and chest physiotherapy and was discharged well on the fourth postoperative day.

Compared with open cholecystectomy, laparoscopic cholecystectomy offers quicker recovery and less postoperative pain. However, this procedure is not without risk. 1-3 Our patient developed a unilateral tension pneumothorax during abdominal insufflation. Since the lungs were normal preoperatively and the ventilatory pressure was not excessive, this pneumothorax most likely resulted from CO<sub>2</sub> being forced from the abdomen, by the increased intra-abdominal pressure into the pleural cavity either via anatomical communications around the aorta or oesophagus or through a congenital pleuroperitoneal canal that had normally been occluded by loose adherence of its walls. A similar mechanism had been postulated for spontaneous pneumothorax following artificially induced pneumoperitoneum.4-6 The absence of subcutaneous emphysema over the chest ruled out the possibility of a misplaced Verres needle or trochar causing gas to track into the pleural cavity.

Pneumothorax is a recognized though rare complication of pneumoperitoneum. It can result from barotrauma, malposition of the Verres needle or trochar or pressure effects from the pneumoperitoneum. This case emphasizes the importance of vigilant intraoperative monitoring to minimize perioperative morbidity and mortality.

L.T. Seow MBBS, M.Med (Anaes)
S.T. Khoo MBBS, M.Med (Anaes), FFARACS
Department of Anaesthesia
National University Hospital
5 Lower Kent Ridge Road
Singapore 0511

### REFERENCES

- I Ponsky JL. Complications of laparoscopic cholecystectomy. Am J Surg 1991; 161: 393-5.
- 2 Lew JKL, Gin T, Oh TE. Anaesthetic problems during laparoscopic cholecystectomy. Anaesth Intensive Care 1992; 20: 91-2.
- 3 Hodgson C, McClelland RMA, Newton JR. Some effects of the peritoneal insufflation of carbon dioxide at laparoscopy. Anaesthesia 1970; 25: 382-90.
- 4 Doctor NH, Hussain Z. Bilateral pneumothorax associated with laparoscopy. Anaesthesia 1973; 28: 75-81.
- 5 Lumsden EGS. Spontaneous pneumothorax complicating artificial pneumoperitoneum. Thorax 1949; 4: 147-51.
- 6 Wu JF, Neptune WB. Pneumothorax as a complication of pneumoperitoneum. American Review of Tuberculosis 1951; 63: 710-13.

# Cervical oro-pharyngeal oedema and severe hypoacusia: complication of antecubital vein catheterization

To the Editor:

Although catheter erosion of vessels remains an important clinical problem, neck swelling and severe hypoacusia secondary to axillary vein erosion is unusual.<sup>1</sup>

A 59-yr-old man was admitted to the SICU with acute alimentary tract bleeding. A central venous catheter (Drum-Cartidge®) was inserted in the right basilic vein without difficulty. Aspiration of blood was easily performed and postinsertion CXR showed the distal tip of the catheter in the axillary vein close to the axillosubclavian junction. Surgical haemosthasis of the ulcer with vagotomy and pyloroplasty was performed 48 hr after admission. During surgery, oedema of the cervical region, oro-pharynx and tongue appeared and the trachea was displaced to the left. Immediately after surgery the oedema progressed rapidly and blood could not be withdrawn from the catheter which led to the suspicion of an aberrant central venous catheter. Accordingly, all fluid administration was stopped and 0.3 ml·kg-1 hydrosoluble contrast was infused. Chest x-ray revealed a regular oval spread of 2-3 cm at the distal end of the catheter, which was interpreted as venous perforation<sup>2</sup> at the level of the axillo-subclavian junction (Figure). The catheter was immediately withdrawn which led to stabilization of the oedema. Following extubation (36 hr later), the patient complained of bilateral severe hypoacusia. Simple otos-

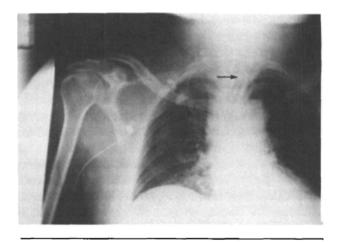


FIGURE Following contrast administration an increase in density is observed around the catheter tip. Cervical oedema and tracheal displacement can also be seen.