test), but tolerated the semi-synthetic analogue: nalbuphine (in vivo administration). Although meperidine can cause pseudo-allergic reaction, therefore ‘false’ positive prick tests, our patient’s strong skin reaction compared with control persons indicated a true hypersensitivity (Fig. 1).

The case demonstrates the importance of drug allergy examinations in perioperative anaphylaxis and the existence of rare fentanyl and propofol induced severe reactions. Our patient’s case was further complicated by the patient’s hypersensitivity to the non-barbiturate-type sedative propofol, which likely contributed to the onset of anaphylaxis during anaesthesia. Patients who experience perioperative anaphylaxis need a thorough examination for drug allergy. The evaluation should include a precise clinical history, consideration of risk factors, and in vitro and in vivo drug allergy tests.

**Conflict of interest**

None declared.

N. Belso´´*
R. Kui
I. Szegesdi
M. Kakuja
K. Kapitány
L. Kemény
Z. Bata-Csörgő
Szeged, Hungary

*E-mail: noribels@mail.derma.szote.u-szeged.hu

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6 Hepner DL. Anaphylaxis during the perioperative period. *Anesth Analg* 2003; 97: 1381–95
doi:10.1093/bja/aeq384

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**Intraoperative transoesophageal echocardiographic detection of a retained surgical sponge**

Editor—We report a case where a retained surgical sponge after aortic valve replacement was detected using intraoperative transoesophageal echocardiography having allowed immediate diagnosis and its removal.

A 66-yr-old patient was admitted for aortic valve replacement. He had a long history of aortic stenosis and regurgitation. Preoperative angiography showed a 40% left ventricular ejection fraction and an enlargement of the left ventricular cavity. Coronary angiogram was normal. Anaesthesia was

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**Fig 1** Mid-oesophageal four-chamber view at 0° showing the sponge in the left ventricle. LA, left atrium; LV, left ventricle; S, sponge.
induced and maintained with sufentanil and propofol. Trans-
oesophageal echocardiography (TOE) performed before car-
diopulmonary bypass (CPB) did not reveal any other
abnormality. After institution of CPB, the aortic valve was
removed and a 21 aortic ATS open pivot bileaflet prosthesis
was implanted. Despite usual care (i.e. fluid adjustment, ino-
trope use), weaning the patient from CPB could not be
achieved. TOE examination revealed a mass inside the left
ventricle, moving freely with each heart beat (Fig. 1). The
presence of a sponge, which could have been placed and
not removed in the left ventricular cavity during decalcifica-
tion of the valve, was detected. CPB was resumed and the
surgeon removed the retained sponge. The patient was
weaned from CPB without difficulty. He underwent a full
recovery and was discharged from the hospital 8 days after
surgery.

Retained foreign bodies after surgery are a concern for
surgeons. Anaesthetists are not usually directly involved in
this problem apart from the induced prolonged duration of
surgery or the need for re-intervention (69% in one
study). Conversely, intracardiac foreign bodies are extre-
meely rare after cardiac surgery and the anaesthetist
can play a crucial role by detecting the problem, in
real time.

The use of TOE in cardiac surgery is not routine in many
centres or it is used selectively and such an intraoperative
diagnosis could have been missed. Recent published guide-
lines for perioperative TOE state that ‘For adult patients
without contraindications, TOE should be used in all open
heart (e.g. valvular procedures) and thoracic aortic surgical
procedures’. Under these circumstances, this complication
could not go unnoticed.

Conflict of interest

None declared.

M. Michel-Cherqui
D. Guilmet
M. Fischler*
Paris, France
*E-mail: m.fischler@hôpital-foch.org

1 Gawande AA, Studdert DM, Orav EJ, Brennan TA, Zinner MJ. Risk
4 Cheitlin MD, Armstrong WF, Aurigemma GP, et al. ACC/AHA/ASE 2003 guideline update for the clinical application of echocardio-
graphy: summary article: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (ACC/AHA/ASE Committee to Update the 1997 Guide-
5 American Society of Anesthesiologists and Society of Cardiovascu-
lar Anesthesiologists Task Force on Transesophageal Echocardiography. Practice guidelines for perioperative transesophageal echocardiography: An updated report by the American Society of Anesthesiologists and the Society of Cardiovascular Anesthesiolo-
gists Task Force on Transesophageal Echocardiography. Anesthesi-
ology 2010; 112: 1084–96

doi:10.1093/bja/aeq388