patients required medical attention for their headache. Backache was reported more frequently following SAB (14 patients) than general anaesthesia (five patients). Nausea or vomiting was twice as common after general anaesthesia as SAB and was more frequent following discharge (18 cases) than in the recovery room (seven cases). The mean duration of anaesthesia was longer for the group receiving SAB, 52 ± 12 minutes, compared to 45 ± 15 min for the group receiving general anaesthesia. The time spent in the recovery room was the same for both groups.

The incidence of PDPH in this study is similar to that reported by Neal *et al.*[3] and does not support the earlier contentions that SAB is unsuitable for outpatients. In carefully selected patients TURP is a suitable procedure for daycare units and either general anaesthesia or SAB is acceptable for this surgery.

P.F. Fancourt-Smith MB FRCPC
P. Merrick BScN
Vancouver, B.C.

REFERENCES

1 *McLoughlin MG, Kinahan TJ.* Transurethral resection of the prostate in the outpatient setting. J Urol 1990; 143: 951–2.
2 *Flaaten H, Raeder J.* Spinal anaesthesia for outpatient surgery. Anaesthesia 1985; 40: 1108–11.
3 *Neal JM, Bridenbaugh LD, Mulroy MF, Palmen BD.* Incidence of post dural puncture headache is similar between 22G Greene and 26G Quincke spinal needles. Anesthesiology 1989; 71: A678.

Double aortic arch presenting as massive haematemesis after removal of a nasogastric tube

To the Editor:

Double aortic arch is a rare but life-threatening, if misdiagnosed, condition. We report here a case with tetralogy of Fallot complicated by the missed diagnosis of double aortic arch.

A 32-week, 2.0-kg female infant was delivered, and was noted to have a heart murmur. On day four of life, tachypnoea and cyanosis became evident. On day nine, she was admitted to our institute and an echocardiographic diagnosis of tetralogy of Fallot with pulmonary atresia, right PDA and right aortic arch was made. Infusion of prostagladin E_1 was started for the treatment of hypoxaemia because of suspected low pulmonary blood flow through the PDA. On day 48 hypercyanotic spells developed and a Blalock-Taussig shunt was placed to improve pulmonary blood flow. The infant slowly improved and on the eighth postoperative day the trachea was extubated. Since infants are obligate nose breathers, the NG tube (Salem sump tube 8 Fr, Argyle) was removed to improve gas exchange. However, removal of the NG tube resulted in massive pulsatile haemorrhage from the mouth and the nose which required transfusion of greater than the child's blood volume, reintubation and replacement of a larger NG tube (12 Fr). Then emergency right thoracotomy was performed for haemostasis. At this time a vascular ring of a double aortic arch and aortoesophageal fistula were present. Ligation and division of the left aortic arch distal of the left subclavian artery dramatically improved the ventilatary difficulty that had continued during positioning with the right side up. The orifices of the aorta and oesophagus were closed uneventfully.

About 20–30% of patients with tetralogy of Fallot are complicated by aortic arch anomalies (a right aortic arch is the most common form and a vascular ring is uncommon). Twenty percent of vascular rings are complicated with congenital heart disease.[1,2] The NG tube in conjunction with a tight vascular ring and an endotracheal tube might have caused compression necrosis of the posterior wall of the oesophagus. We do not know whether this complication could have been avoided by using a smaller NG tube or by earlier tracheal extubation. It was fortunate that reintubation of a NG tube produced a good resolution in this case.

N. Yahagi MD
A. Nishikawa MD
Y. Sai MD
J. Matsui MD
Yoshikuni Amakata MD
Department of Anesthesiology and Intensive Care Unit
Shiga University of Medical Science
Ohtsu, 520–21 Shiga, Japan

REFERENCES

1 *Binet JP, Langlois J.* Aortic arch anomalies in children and infants. J Thorac Cardiovasc Surg 1977; 73: 248–52.
2 *Keith JD, Rowe RD, Vlad P.* Heart disease in infancy and childhood. 3rd ed. New York: Macmillan, 1978.