a residual pneumothorax, as this can be avoided by reinflating the lungs under direct vision until they are seen to bulge into the lumen of the endoscope. We are of the opinion that such a catheter would complicate the procedure and increase the duration of stay in hospital. Patients lacking complications were discharged from hospital after 12-24 h.

We did not compare the incidence of arterial desaturation between the first and second side. We discussed in our article the possible mechanism of this desaturation. In practice, after it had been checked that there was no endobronchial tube misplacement, the arterial desaturation immediately improved with one or two small manual ventilations of the collapsed lung. This manoeuvre does not disturb the surgeon and we would suggest that the arterial desaturation is related to the degree of lung collapse [3].

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2. Ahlburg P, Molgaard J, Rasmussen BS, Noreng MF. Intrapleural administration of 0.5% plain bupivacaine compared to 0.5% epinephrine: a hemodynamic and ventilatory study. Regional Anesthesia 1991; 16: 257-261.

Sir,—We read with interest the article by Jedeikin and colleagues on anaesthesia for thoracoscopic sympathectomy as treatment for upper limb hyperhidrosis [1, 2]. They reported that 56 of their 58 patients experienced distressing retrosternal or upper back pain during the first 2-4 h after operation. Recently, we have anaesthetized six patients for this procedure in our hospital and have found that intrapleural 0.5% bupivacaine introduced immediately before removal of the last endoscopic port provided excellent postoperative pain relief. As far as we are aware, this technique has not been described previously [3-6].

Whereas 43 of Dr Jedeikin’s 58 patients had bilateral sympathectomies, all of our patients had unilateral procedures. In most respects, the anaesthetic techniques were similar. Our patients received either no premedication or a benzodiazepine. Induction was with thiopentone 3-5 mg kg⁻¹. Intubation and ventilation were performed with left-sided Rotorshar endobronchial tubes and anaesthesia was maintained with enflurane in oxygen-nitrous oxide supplemented with either papaveretum 0.2 mg kg⁻¹ or alfentanil 0.1 mg kg⁻¹. At the end of the procedure, 0.5% bupivacaine 2 mg kg⁻¹ was instilled intrapleurally. No intrapleural drains were left in situ. All patients were comfortable in the recovery ward, the worst pain being described as a dull ache in the ipsilateral arm and relieved by paracetamol. No toxic effects of bupivacaine were seen.

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Sir,—The review by Dr Simpson on perioperative blood loss and its reduction was most interesting [1]. As the level of concern about transfusion-related infection has increased greatly in the past decade, so has interest in means of reducing requirements for blood products. The other reason for reducing intraoperative bleeding is to facilitate surgery by providing a bloodless field. However, the article did not include some of the most recent techniques available to the anaesthetist to decrease blood loss.

Normovolaemic haemodilution is used often to decrease the need for transfusion of homologous blood. The technique is safe and effective as long as rigorous criteria are followed [2]. The technique also offers several advantages such as increased cardiac output, better regional blood flow and better tissue perfusion. The practical aspects, physiological consequences and inclusion criteria of the technique have been reviewed recently [3].

Specific pharmacological agents have been used to decrease blood loss. They are used more commonly during operations in which massive blood loss is anticipated, such as during cardiac surgery and orthotopic liver transplantation. An impressive reduction in both intraoperative and postoperative blood loss was reported after the use of high dose aprotinin during cardiac surgery [4]. Aprotinin (Trasylo1) is a serine protease inhibitor known to inhibit human plasmin, trypsin and tissue kallikrein. It is postulated that aprotinin prevents the activation of plasma proteins and platelets during cardiopulmonary bypass, and thereby helps to preserve normal coagulation. Aprotinin has been used successfully for the reduction of blood loss after liver transplantation [5] and peripheral vascular surgery [6]. Synthetic and natural antifibrinolytic agents have been used to decrease bleeding after cardiac surgery.

Desmopressin, a synthetic form of the hormone vasopressin which releases factor VIII and von Willebrand’s factor from the endothelial cells, is postulated to prevent the activation of plasma proteins and may reduce blood loss during surgery [7]. In practice, after it had been checked that there was no endobronchial tube misplacement, the arterial desaturation immediately improved with one or two small manual ventilations of the collapsed lung. This manoeuvre does not disturb the surgeon and we would suggest that the arterial desaturation is related to the degree of lung collapse [3].

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