choice in children, especially younger ones with complex severe left ventricular outflow tract obstruction. In patients with predo-
minant aortic regurgitation, especially those with bicuspid aortic
valve or rheumatic fever associated with a geometric mismatch
between the aortic and pulmonary valve due to dilated aortic
annulus, the Ross procedure should be employed more selec-
tively, and technical modifications that aim to prevent future
annular and root dilatation should be considered.

REFERENCES

et al. The Ross procedure in children: Preoperative haemodynamic mani-
festation has significant effect on late autograft re-operation. Eur J


LETTER TO THE EDITOR

Paravertebral blockade in thoracoscopic surgery†

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We read with interest the study by Fibla et al. [1], published in October 2011, and would like to make the following observations.

The authors introduce video-assisted thoracoscopic surgery (VATS) procedures as a somewhat overlooked cause of significant acute and chronic pain. We would agree with this and commend the authors for their interest in addressing this fact. The technique of video-assisted paravertebral catheter place-
ment and paravertebral block (PVB) would seem an elegant one. However, the study itself is not without significant flaws, which undermine the findings and so fail to provide substantial support for the technique.

The authors powered their study to detect a reduction of one point of the visual analogue score (VAS), and we would question the clinical significance of this, particularly in an unblinded study such as this. Quantifying acute postoperative pain is difficult, and the VAS score is not without its limitations, which have been documented previously [2].

Furthermore, the authors describe the drawbacks of ‘blind’ PVBs, and include epidural spread and pneumothorax. We would dispute the significance of causing a pneumothorax in a patient undergoing a VATS procedure, and are unsure how the video-assisted technique prevents epidural spread, given the documented anatomical communication of this space with the paravertebral space, via the intervertebral foramina [3].

The failure rate of 12% quoted is taken from a study of PVBs placed in blind fashion, but whose position was confirmed fluor-
oscopically. Such a high failure rate would seem surprising, but the study subjects were patients with chronic pain, and so this failure rate is not applicable in the context of elective surgery [4]. A more recent study quotes a failure rate of 6.1% when a nerve stimulator is used, and when adjuncts such as clonidine with an opioid are included in the block mixture.

An advantage of the blind technique is that it can be employed prior to surgical incision, and so be incorporated as part of a multi-modal, pre-emptive analgesic technique, a fact that may carry significant weight in the context of chronic pain.

We feel that this technique provides an interesting alternative to the ‘blind’ PVB, but believe more substantial evidence is required before it is used in preference.

REFERENCES

[1] Fibla J, Molins L, Manuel Mier J, Sierra A, Carranza D, Vidal G. The effi-
cacy of paravertebral block using a catheter technique for postoperative
analgesia in thoracoscopic surgery: A randomized trial. Eur J Cardiothorac


†The corresponding author of the original article [1] was invited to reply, but did not respond.