and its upcoming additions as a part of the standard curriculum of our residency teaching programme.

Funding
This work was supported by Starter grant from Department of Anesthesiology, Penn State College of Medicine, Milton S. Hershey Medical Center.

S. D. Adhikary*
A. Hadzic
P. M. McQuillan
Hershey, USA
∗E-mail: sadhikary1@hmc.psu.edu

doi:10.1093/bja/aet364

Paediatric application of the EZ-Blocker for thoracoscopic sympathectomy
Editor—The EZ-Blocker is an efficient and effective device for one-lung ventilation and seems to have advantages when compared with the double-lumen tube.1 2 It has been used for several thoracic surgery procedures in adults, but no report of a paediatric usage has been published yet.

We wanted to emphasize a further advantage of the EZ-Blocker by reporting a paediatric patient, who underwent bilateral thoracoscopic sympathectomy in our hospital. She was 10 yr old, 145 cm tall, and weighed 35 kg, and was complaining about excessive sweating of the hands and underarms. After induction of anaesthesia, the trachea was intubated with a 7.0 sized single-lumen tube. The EZ-Blocker was placed under visual guidance of the fibreoptic bronchoscope as described by Mungroop and colleagues.3 The cuffs were inflated, respectively, to be assured of proper positioning. While the patient was placed in a right lateral position, her head was held carefully together with the EZ-Blocker (Fig. 1). Immediately before the beginning of the surgery, the cuff inserted into the left main bronchus was deflated and during single-lung ventilation, pressure-controlled ventilation with a peak pressure of 20–25 cm H2O and a PEEP of 5 cm H2O was used on the dependent lung. Ventilation frequency and oxygen in air were maintained to stabilize end-tidal carbon dioxide within normal range. After finishing surgery at the left side, the patient was turned to the left side and the

Fig 1 This image demonstrates all four components of the modular Simulator. (A) Portable ultrasound, (B) phantom model (MinSim™), (C) bi-plane video cameras with monitor, and (D) storage and synthesis unit placed in a simulation scenario. If reading the PDF online, click on the image to view the video. The Video demonstrates the different components of the modular Simulator for Teaching Hand – Eye Coordination and its usability during a simulation scenario.
ventilation procedure was repeated. During anaesthesia, blood gas samples were obtained and neither hypercarbia nor hypoxia occurred at both sides of single-lung ventilation. Video-assisted thoracic surgery was successfully performed and the surgeon satisfaction was very good. The patient was extubated without complications and transferred to the post-operative anaesthesia care. No discomforts like sore throat or minor injuries at the trachea were detected. We think that the development of a smaller EZ-Blocker could help anaesthetic management for paediatric thoracic surgery a lot and further clinical studies could improve EZ-Blocker administration.

**Declaration of interest**

None declared.

C. T. Isil*

U. Temel

S. Oba

Istanbul, Turkey

*E-mail: cananonaldi@yahoo.com


doi:10.1093/bja/aet365

**Quadriplegia after interscalene block for shoulder surgery in sitting position**

Editor—A female patient, aged 50 yr, was undergoing shoulder arthroscopy. Owing to anticipated difficult airway, awake fibreoptic tracheal intubation was tried but was abandoned due to lack of co-operation. A rapid sequence induction of general anaesthesia was achieved with propofol 150 mg and succinylcholine 100, and trachea was intubated after in-line stabilizing of the neck. The anaesthesia was maintained with sevoflurane and nitrous oxide in oxygen.

Then interscalene block was performed using the posterior approach. A total volume of 30 ml local anaesthetics (10 ml lidocaine 2% and 20 ml bupivacaine 0.5%) was injected with the patient lying in the lateral position. The positioning of the patient was changed to sitting position for surgery.

Immediately after the positioning, the patient developed severe hypotension and bradycardia (arterial pressure 60/30 mm Hg and hear rate 40 beats min⁻¹), which responded to ephedrine boluses (up to 45 mg) and i.v. fluids. After the surgery, the recovery of spontaneous breathing was delayed and the patient had atonia of all four limbs. The patient was transferred to the intensive care for mechanical ventilation. After about 4 h, the patient started to fight on the ventilator with good tidal volume and lower limbs movement. The trachea was extubated successfully.

Neurological examination revealed 4/5 motor power for all lower limbs muscles with intact sensation and reflexes of both sides, 3/5 motor power for the left upper limb (operated side) with numbness, and 1/5 motor power for the right upper limb with complete impairment of deep sensation, and sluggish touch and light sensation.

MRI of cervical spine was done and it showed significant cord oedema of recent origin involving a long segment of the cervical cord (Fig. 1).

Subsequently, the patient showed remarkable improvement in the next 5 days with return of all neurological functions except monoparesis of the right upper limb with numbness. She was then discharged to a general ward.

A day after her discharge, she was readmitted to the intensive care unit because of relapse of her neurological dysfunction with weakness and numbness in all limbs. A second MRI was done which revealed the same signal intensity of the same cervical regions, suggesting myelomalacia from C2 to C7. Steroid treatment was restarted and the patient showed variable neurological changes in the next 10 days. The last MRI at this stage showed resolved oedema, but hyperintense segments from C2 to C7, suggesting underlying ischaemia. We believe that acute onset and later fluctuating course of neurological damage did not concur with the highly possible aetiology of inadvertent injection of local anaesthetics into the substance of the cervical spinal cord or its spaces. But other co-factors played a major role such as failed trial of awake fibreoptic intubation, sitting position which was described frequently in literature to cause spinal cord ischaemia, especially in posterior fossa surgery and the posterior