and the ECG signs completely resolved within 20 min of leaving theatre. An arterial blood gas sample taken immediately in theatre recovery showed a metabolic acidosis (pH 7.30, base deficit 7), and electrolytes revealed serum potassium of 5.9 mmol L^{-1}. The patient left theatre recovery 3 h postoperatively, with a completely normal ECG and repeat bloods, which showed resolution of the previous discrepancies. The patient made a full recovery and was discharged home 2 days later.

Discussion

The timing of these events, the biochemical findings and, perhaps, the patient's muscular body habitus, lead us to suggest a cause for this event attributable to the surgical tourniquet. We hypothesize that a relatively long tourniquet time and its placement on the muscular arm of our patient led to muscle ischaemia with accumulation and release of lactate and intracellular mediators following tourniquet deflation. The onset of signs around 20 min following deflation coupled with the raised serum potassium and metabolic acidosis support this idea. These circulating mediators can be implicated in causing a degree of coronary vasospasm sufficient to produce the noted ECG appearances, but also explain the relatively rapid resolution of the problem. Literature review reveals studies that support our hypothesis of metabolic and haemodynamic insult associated with prolonged tourniquet inflation [1,2].

In addition, there are reports in the literature of vasospasm involving the limb on which the tourniquet had been placed causing ischaemia [3] and a report of acute renal failure secondary to rhabdomyolysis in a fit and muscular young male due to tourniquet application [4]. We are not aware of any reports of cardiac ischaemia, which may likely be attributable to similar mechanisms in our muscular young patient.

Although we cannot state with certainty that this was indeed the mechanism of cardiac ischaemia, on ruling out other common intraoperative triggers as possibilities and on reviewing the literature, we feel that this is a plausible and most likely explanation and is of importance and interest to those working with patients using surgical tourniquets.

It is difficult to say how our management of a similar case in the future may change with respect to this experience. The tourniquet is required to facilitate good surgical conditions and the procedure was necessarily prolonged. Surgeons, anaesthetists and theatre staff are always attentive to duration of tourniquet use, and it may be impossible to eliminate all associated complications.

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Use of the Airtraq® in the difficult airway

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EDITOR:
The Airtraq® (Prodol Meditec, Vizcaya, Spain) [1,2] is an optical laryngoscope which obtains views of the glottis without the need for alignment of the oral, pharyngeal and laryngeal axes (Fig. 1). It consists of two channels, one which houses an endotracheal tube and another which contains an optical system. The device is inserted in a similar fashion to insertion of an intubating laryngeal mask airway with the tip of the Airtraq® eventually sitting in the vallecula. In this position, the glottis is viewed indirectly through a proximal viewfinder and the endotracheal tube

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Figure 1.
The Airtraq.

advanced through the vocal cords. Recently, there have been two manikin studies that have described its performance. The device was evaluated in normal and simulated difficult airways. Until now, there have been no descriptions of its use in live subjects. We describe two patients in whom the Airtraq®, compared with the Macintosh blade, provided superior views of the larynx facilitating endotracheal intubation.

The first case was an anxious 59-yr-old male who was to undergo a total laryngectomy for cancer of the larynx. Anaesthetics had been complicated previously by Grade 4 views at direct laryngoscopy necessitating awake intubations. Initially, topical anaesthesia was applied to the upper airway and glycopyrolate administered intravenously. A target controlled infusion of propofol and remifentanil was commenced at a sedation dose. A Grade 4 view was confirmed at direct laryngoscopy using a Macintosh laryngoscope. The Airtraq® was subsequently used providing Grade 1 views of the glottis and easy passage of an endotracheal tube.

The second case was a 42-yr-old female who presented for a routine septoplasy. Past medical history included pain in the temperomandibular joint during mastication and reduced mouth opening was noted on examination. Following induction of anaesthesia with propofol, fentanyl and atracurium, a Grade 3 view of the glottis was achieved at direct laryngoscopy using the Macintosh laryngoscope. When the Airtraq® was employed, a Grade 1 view of the glottis was observed and endotracheal intubation allowed to proceed uneventfully.

The Airtraq® is cheap and extremely easy to use, and we believe it should be included in the anaesthetist's armamentarium for the difficult airway. Unlike the intubating laryngeal mask, endotracheal intubation using the Airtraq® is achieved under direct visualization; however, more patient studies are required.

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Subdural or subarachnoid catheter?

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EDITOR:
I read with interest a case of total spinal anaesthesia reported by Batra and colleagues [1]. I would like to comment on their reasoning for the unusual spread of local anaesthetic leading to total spinal anaesthesia. After a careful review of the events, one cannot resist thinking that it hardly resembles a subdural block.

'Soon after the administration of the test dose', their patient complained of dizziness and weakness. This clinical picture is typically due to a subarachnoid injection of local anaesthetic. The block spread with subdural is more like an epidural with much slower onset than subarachnoid block with minimal hypotension. Their patient was uncon-

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