improve peripheral perfusion to an extremity and improve the reliability of a poorly functioning pulse oximeter. Two caveats exist. Firstly, the reason for poor perfusion should also be sought and treated (e.g., hypovolemia, sepsis). Secondly, great care must be taken to avoid thermal injury by appropriate diffusion of air flow and regular inspection of the limb.

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Laryngeal mask airway for preservation of the external branch of the superior laryngeal nerve during thyroid surgery

To the Editor:
We read with interest the article by Hillerman *et al.*[1] concerning laryngeal nerve identification during thyroid surgery using the laryngeal mask airway (LMA). Although postoperative voice changes are usually attributed to recurrent laryngeal nerve injury, the external branch of the superior laryngeal nerve (EBSLN) is also at risk since it runs close to the superior thyroid artery, which is ligated during surgery.[2] Injury to the EBSLN occurs in 4–10%[3,4] of patients and results in huskiness and voice fatigue since it is the only motor supply for the cricothyroid muscles, which tense the vocal cords. Identification of the EBSLN and individual ligation of the superior thyroid vessels are imperative to avoid injury. A particular problem during dissection is that the pharyngeal wall is soft and collapsible making exposure of the EBSLN difficult. A technique we discovered which overcomes this problem is to use the LMA to control the tension and position of the pharyngeal wall. The technique involves insertion of the LMA behind the tracheal tube and inflation of the cuff until the surgical conditions are optimal. The technique can also be used when the LMA is the ventilatory device, but the range of cuff volumes is more restricted since the seal with the pharynx must remain intact. We have used this technique on 17 patients and have had no problems with location of the EBSLN.

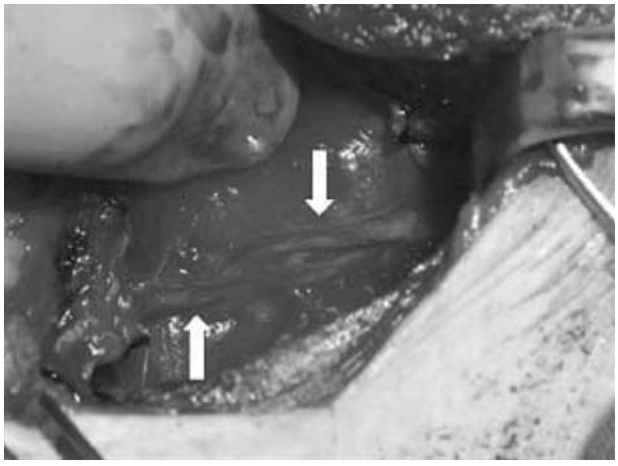

FIGURE Thyroid surgery with the laryngeal mask airway. View of left side of the neck during dissection. By splinting open the pharynx, the cuff facilitates identification and preservation of the external laryngeal nerve and its branches (arrows).

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Prophylactic iv metaraminol during spinal anesthesia for elective Cesarean delivery

To the Editor:
The use of potent vasopressors to combat maternal hypotension following spinal anesthesia for Cesarean delivery is increasingly common despite initial concerns of fetal compromise.[1] Metaraminol is a mixed alpha- and beta-adrenergic agonist with a predominant alpha effect at a clinical dose. A recent study showed that it is associated with less neonatal acidosis and more closely controlled arterial pressure compared with ephedrine.[2] This double-blinded study evaluated prophylactic metaraminol on fetal acid-base status.

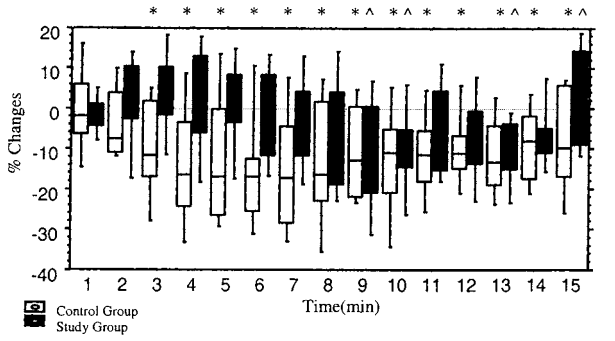

FIGURE Box plot of percentage changes in systolic blood pressure from baseline in the first 15 min after induction of spinal anesthesia. * and ^ represent significant changes ($P < 0.05$) from baseline for the control and study groups respectively.

Thirty-three ASA physical status I term parturients undergoing Cesarean section were randomized into two groups who received 1 mg metaraminol (Group S) or normal saline (Group C) in equal volumes infused over one minute, two minutes after the intrathecal injection of 2.2 mL 0.5% heavy bupivacaine with 15 μg fentanyl. Volume loading was the same in both groups and the anesthesiologist managing the mother was unaware of group assignment. Blood pressure (BP) and heart rate (HR) were recorded at one-minute intervals for 15 min. A systolic BP < 80% of baseline was treated with 5 mg ephedrine every minute plus crystalloid until it normalized. Maternal hemodynamics, acid-base status of umbilical arterial and venous cord blood (UV), and Apgar scores were compared.

Demographic data, baseline hemodynamic data, level of block, amount of fluid used and incision-to-delivery time were comparable between groups. The percentage changes in systolic BP and HR from baseline were insignificant in Group S for the first seven minutes while Group C showed significant reductions in systolic BP and rises in HR (Figure). Between-groups comparisons also showed that Group S had higher systolic BP ($P = 0.025$) and lower HR ($P = 0.035$) than Group C for the first ten minutes. Ephedrine requirement (4.4 *vs* 12.2 mg; $P = 0.012$) and UV acidemia (7.35 *vs* 7.32; $P = 0.041$) was less in Group S. Venous cord blood pH was greater than 7.2 in all cases. The two groups did not differ in systolic BP and HR for the last five minutes of the study and Apgar scores were similar in both groups. Our results suggest that prophylactic metaraminol delayed the onset of maternal hypotension, lessened ephedrine requirements and was associated with a better UV acid-base status. Though the clinical significance of our findings remains unclear, they support the concept that metaraminol may be a safe alternative despite initial worries of impaired uteroplacental circulation.[3]

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Acute pulmonary edema in relation with single coronary ostium following acoustic neuroma surgery

To the Editor:

A 61-yr-old woman without risk factors for cardiovascular diseases underwent elective surgery for a right acoustic neuroma. Surgery lasted nine hours, a relative hypotension (around 80/50 mmHg) was tolerated throughout the surgical procedure and no cardiovascular event was recorded. Two hours after extubation in the intensive care unit, she suddenly developed acute respiratory distress with marked hypoxemia (pO_2 52 mmHg, O_2 saturation 73%, pCO_2 69 mmHg). The chest *x-ray* was consistent with acute pulmonary edema; central venous pressure rose to 16 mmHg. The patient needed urgent re-intubation. The electrocardiogram showed ST-segment elevation in the anterior leads (V1–V3) and T-wave inversion in the lateral leads. Cardiac enzymes increased with creatine kinase (CK) 1615 $IU \cdot L^{-1}$, CK-MB 30.6 $\mu g \cdot L^{-1}$ (normal < 3.5 $\mu g \cdot L^{-1}$) and troponine I 0.48 $ng \cdot mL^{-1}$ (normal < 0.10). Cardiac echography showed severe impairment of left ventricular systolic function, with anterior, apical and septal akinesia; left ventricular