

Correspondence



Phosphate salt bowel preparation regimens alter perioperative acid-base and electrolyte balance

To the Editor:

Ezri *et al.*¹ described serum electrolyte changes following ingestion of cathartics prior to bowel resection surgery. The authors dosed 90 mL of Fleet® Phospho-soda® to their subjects. This is twice the recommended dose of 30–45 mL according to the current professional Fleet® Phospho-soda® labeling.² Fleet® Phospho-soda® should be used only at the recommended dosage and only in patients that do not have contraindications to the drug product.

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Accepted for publication May 5, 2006.

References

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Reply:

We would like to thank Michael Caswell, PhD, for his important observations regarding the dose and contraindications to the use of sodium phosphate salts for bowel preparation prior to surgery.

First, as we stated in our manuscript, the drug was not used in cases where it was contraindicated.¹ Secondly, although we did use 90 mL of solution, we prescribed the medication in two doses, separated by an eight-hour interval. While the time interval between the administration of doses varies amongst studies, a 90 mL volume, administered in two separate doses is recommended in the drug leaflet (Soffodex by Dexxon Ltd, Or-Akiva, Hadera, Israel) and several recently published studies.^{2–4}

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The ProSeal LMA does not cause laryngeal edema

To the Editor:

We were intrigued by the case report by Chin and Chee¹ but have doubts about whether the authors properly interpreted the fiberoptic image they presented. Because the entire case report is built upon the premise that this image portrays “laryngeal edema,” an improper interpretation would jeopardize not only their diagnosis, but also the rationale for treatment with dexamethasone and further explanation of intraoperative events.

We suggest a more likely interpretation of the fiberoptic airway examination in patients with a ProSeal™ laryngeal mask airway (PLMA; LMA North America, Inc., San Diego, CA, USA). Figures 1 and 2 show, in the absence of “laryngeal edema,” the more common problem of mechanical obstruction of the laryngeal inlet by the cuff and drain tube of the PLMA.^{2,3}

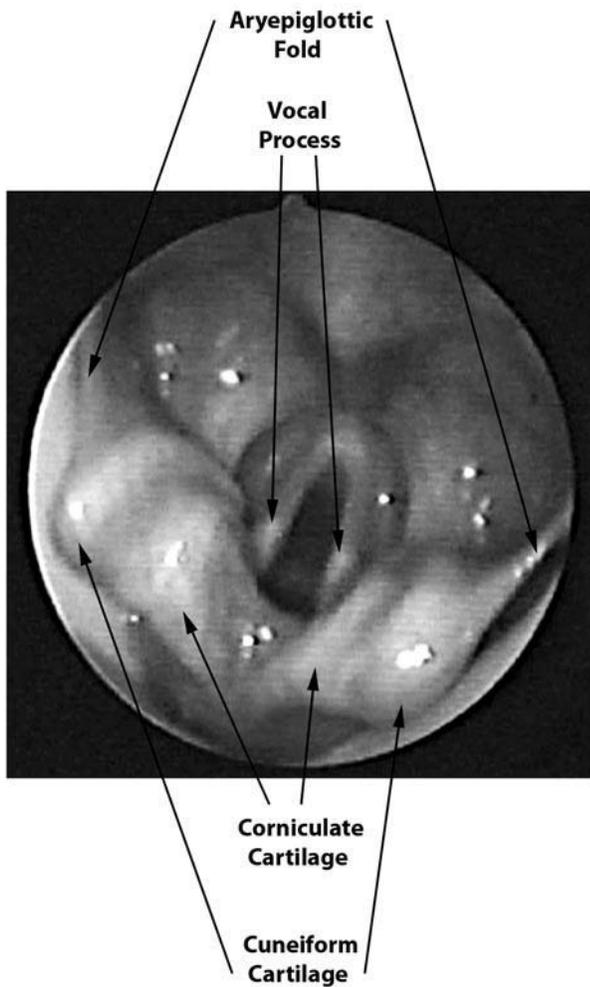


FIGURE 1 View through the PLMA in a patient where the corniculate and cuneiform cartilages are easily distinguished.

Mechanical obstruction of the laryngeal inlet involves medial displacement of the arytenoid cartilages and aryepiglottic folds, caused by the bulky tip of the PLMA, and can present a challenge to the clinician to accurately identify glottic and supraglottic structures in their distorted positions. To be able to interpret more complicated fiberoptic images it is helpful to appreciate the presence of the corniculate, and especially the cuneiform cartilages as in Figure 1. These cartilages appear quite large when viewed up close, and they provide important landmarks when trying to understand complex distortions of the laryngeal inlet with the PLMA.

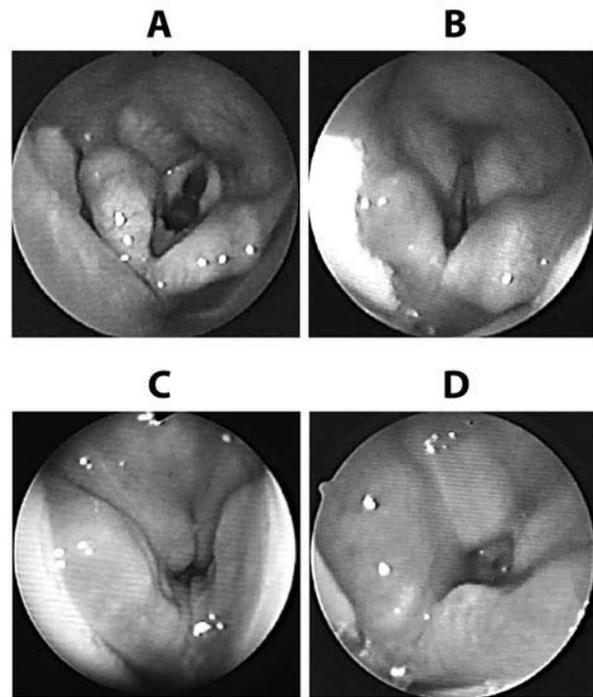


FIGURE 2 Fiberoptic images A-D from four different patients, depicting increasing degrees of partial upper airway obstruction.

Figure 2 shows the appearance of the larynx in four different patients with the PLMA. We used a bronchoscopic adapter to observe the larynx throughout the respiratory cycle and the fiberoptic images in the figure were all captured during inspiration. Case A has a widely patent airway whereas cases B, C, and D depict increasing degrees of compression and partial upper airway obstruction. Although cases B, C, and D resemble the image from the case report, none of these patients experienced “laryngeal edema.” Instead, the fiberoptic views show narrowing of the glottis and inward displacement of the cuneiform and corniculate cartilages. Again, the bulky prominences are the corniculate and cuneiform cartilages, and do not represent “laryngeal edema” affecting the aryepiglottic folds.

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 Accepted for publication May 8, 2006.

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- 3 Stix MS, O'Connor CJ Jr. Maximum minute ventilation test for the ProSeal™ laryngeal mask airway. *Anesth Analg* 2002; 95: 1782–7.

Reply:

We sincerely thank Stix and colleagues for their valuable comments and interesting figures. They have clearly shown that the ProSeal™ laryngeal mask airway (PLMA; Laryngeal Mask Company, Henley-on-Thames, UK) has a tendency to exert pressure on, and cause mechanical distortion of the larynx, a fact that we alluded to in our discussion.

We agree that the appearance of the aryepiglottic folds in our figure is somewhat similar to that shown by Stix and colleagues, and that it may be difficult to ascertain if there is significant edema of these structures. We disagree, however, that mechanical obstruction was the pri-

mary cause of the observed clinical phenomena. The most striking feature in our case was edema of the true vocal cords. This may be appreciated from their abnormal bulbous appearance, and the manner in which they stand out in relief against the surrounding mucosa (Figure). The rima glottidis was consequently narrowed to two pinhole-sized openings, which accounts for the clinical finding of high-pitched wheeze. Previous reports of mechanical obstruction do not describe wheeze or stridor as a clinical feature.^{1,2} The delayed onset of wheeze and increased airway resistance, as well as clinical resolution following the administration of iv dexamethasone, is also inconsistent with mechanical obstruction as the primary cause. Finally, recommended measures to relieve mechanical obstruction include cuff deflation and repositioning of the head and neck in the sniffing position,¹ none of which was attempted in our patient.

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- 2 Stix MS, O'Connor CJ Jr. Maximum minute ventilation test for the ProSeal laryngeal mask airway. *Anesth Analg* 2002; 95: 1782–7.

Spinal cord transmission of afferent neuronal activity despite surgical conduction anesthesia

To the Editor:

It remains unclear as to what is the most reliable method for testing the anesthetic level after intrathecal injection of local anesthetics. Although transcutaneous electrical stimulation (TENS; 5 sec, 60 mA, 50 Hz, 0.25 msec square-wave electrical impulse) has been proposed as an equivalent to surgical incision, a recent study in patients undergoing Cesarean delivery demonstrated that TENS could be felt by 30% of patients despite an adequate surgical block.^{1,2} This observation attests to spinal cord transmission of afferent neuronal activity despite adequate conduction anesthesia. We recently witnessed evidence of this phenomenon in a clinical setting.

A 56-yr-old male patient presented for elective repair of a pathologic fracture of his left acetabulum under

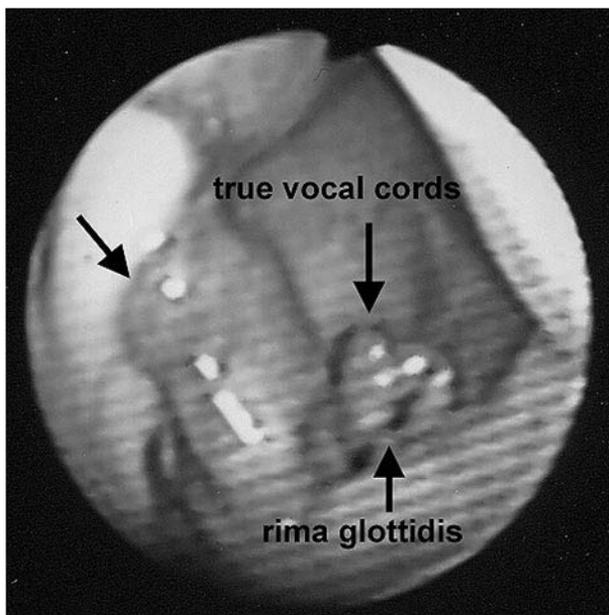


FIGURE Fibreoptic bronchoscopic view of the laryngeal inlet. The true vocal cords have an abnormally swollen, bulbous appearance, and the rima glottidis has been narrowed to two pinhole-sized openings (labelled arrows). There is also localized swelling of the left aryepiglottic fold (unlabelled arrow).