In Reply—Yemen is correct that standard criteria and blinding are important in comparing the effect of treatment on the time of discharge. The decision to discharge patients from the surgical wards was made by the attending surgeon. All of the medical staff taking care of the patients were scrupulously blinded to the analgesia regimen throughout the hospital stay. The discharge criteria were those commonly used for all the patients on surgical wards.

In response to de Leon-Cassola and Lema, we have explained in the Discussion of our paper why we chose the doses of bupivacaine and morphine. The risk with low doses of either parenteral or epidural morphine is insufficient relief of pain, and the potential risk of higher doses is to increase the number of severe episodes of hemoglobin oxygen desaturation. Because we combined bupivacaine and morphine and because all of our patients were on regular surgical wards, we used a low dose of epidural morphine (0.25 mg/h) that has been reported to be safe. One of the inclusion criteria was elective major abdominal surgery for cancer via a bisubcostal or a large midline incision extending into the upper part of the abdomen for all patients in the study. The different types of surgery were: hepatectomy, 22%; gastrectomy, 15%; pancreatectomy, 7%; colectomy, 21%; rectal surgery for cancer, 19%; cystectomy with ileoplasty, 7%; and laparotomy, 9%. Therefore, it is difficult to compare our results to those of de Leon-Cassola et al., which were obtained in patients having undergone radical hysterectomy with lymph node dissection. The longest mean length of hospital stay in de Leon-Cassola et al.'s study was 14 days, which is not very different from the 18 days in our study, given that the types of surgery were different.

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References


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Spurious Anesthesia Alarm in an Anesthetized Patient

To the Editor—A 46-yr-old man entered the hospital for full-mouth dental extractions under general nasotracheal anesthesia. The patient was healthy except for a smoking history of 20 pack-yr and a hearing impediment. Fentanyl and midazolam were used for premedication. Monitoring consisted of an electrocardiogram and a skin temperature probe via a Protocol Systems, Inc. PROPAQ 106EL and blood pressure, pulse oximetry, and capnography via a North American Drager NARKOMED 3 anesthesia machine. Nasotracheal intubation was performed after an oxygenation, thipotental, and succinylcholine induction sequence. Ventilation was mechanically controlled and anesthesia maintained with nitrous oxide, oxygen, and isoflurane.

Approximately 3 min after induction, a loud, piercing, constant, high-pitched sound was heard. The patient's blood pressure at this time was 130/74 mmHg; the hemoglobin oxygen saturation was 99%; and the capnography tracing (end-tidal carbon dioxide 36 mmHg)


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Reference

1. Pollack MC: Amplification for the hearing impaired. New York,
Grune & Stratton, 1975, pp 33–39

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Laryngeal Mask Airway in the Cannot-intubate,
Cannot-ventilate Situation

To the Editor—The excellent editorial by Benumof, “Laryngeal
Mask Airway: Indications and Contraindications,”\(^\text{1}\) suggests that in-
sertion of the laryngeal mask airway (LMA) is a reasonable maneu-
ver to try quickly in the cannot-ventilate, cannot-intubate situation, ex-
cept when local pathology of the pharynx or larynx precludes a rea-
sonable chance of even limited gas exchange. The American Society
of Anesthesiologists Task Force has included the LMA among the sug-
gested equipment of the portable storage unit for difficult airway
management.\(^\text{2}\) The following case report illustrates that the LMA may
be life-saving in the scenario of inability to intubate the trachea or
ventilate the patient’s lungs after induction of anesthesia.

The patient was a 50-yr-old woman who was scheduled for elective
dobutamine-induced hypotension. Precatheterization evaluation predicted the pos-
sibility of difficult tracheal intubation, as suggested by a receding
mandible and a thyromental distance of less than 3 cm. The situation
was explained to the patient, but she refused the concept of regional
anesthesia or awake tracheal intubation. Equipment required for dif-
cult airway management was prepared, and the patient was moni-
tored by continuous electrocardiogram and pulse oximetry (SpO\(_2\)).
After preoxygenation for 3 min, general anesthesia was induced by
propofol 2 mg·kg\(^{-1}\) and succinylcholine 1.5 mg·kg\(^{-1}\). After direct
laryngoscopy, the glottis could not be visualized, and only the tip of
the epiglottis could be seen. Repeated attempts of tracheal intu-
bation using a bougie introducer failed. An oral airway was inserted,
and ventilation with 100% oxygen using a tight-fitting face mask was
attempted. However, it was impossible to ventilate the patient’s lungs.
The SpO\(_2\) decreased to rapidly < 90%, and the electrocardiogram
showed multiple ventricular extrasystoles. The oral airway was re-
moved, and a size-3 LMA was inserted. After inflation of its cuff with
20 ml air, the LMA was connected to the anesthesia circuit, and
ventilation of both lungs with 100% oxygen was achieved easily.
The SpO\(_2\) increased to 100%, and normal sinus rhythm was restored.
Adequate oxygenation was maintained during surgery, even though
the inspired oxygen concentration was decreased to 33% oxygen in
nitrous oxide. Muscle relaxation was maintained by succinylcholine
infusion, and ventilation was easily controlled \(\text{via}\) the LMA throughout
the surgical procedure. Recovery was uneventful.

Our experience supports previous reports that have shown that
insertion of the LMA is a simple noninvasive maneuver that may rapidly
restore efficient ventilation in the cannot-intubate, cannot-ventilate
situation.\(^\text{2,3}\) Because controlled ventilation is one of the relative con-
traindications for LMA, flexible fiberoptic bronchoscopy and insertion
of an endotracheal tube over the bronchoscope through the LMA
might have been more appropriate, once the laryngeal mask has been
inserted. This is particularly indicated in patients with decreased
lung compliance or increased airway resistance, as well as in patients
who have a high risk of regurgitation! Also, the LMA may be inadequate
in 6% of patients with no anticipated airway difficulties,\(^\text{4}\) and hence
it may fail to provide adequate gas exchange in some anesthetized
paralyzed patients whose trachea cannot be intubated conventionally.
Thus, whenever insertion of the LMA does not effect gas exchange
quickly in a patient with a difficult airway, then other alternative
techniques such as transtracheal jet ventilation should be instituted
immediately.\(^\text{1,2,3}\)

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References

1. Benumof JL: Laryngeal mask airway: Indications and contrain-
2. Practice guidelines for management of the difficult airway: A

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