Reference


(Accepted for publication September 10, 1997.)

The Practice of Using Sevoflurane Inhalation Induction for Emergency Cesarean Section and a Parturient with No Intravenous Access

To the Editor.—Schaut et al. described a successful mask inhalation induction for emergency cesarean section in a patient without intravenous access. The authors acknowledged the limitations associated with two other anesthetic options for this challenging scenario: local infiltration by the obstetrician and intramuscular rapid sequence induction. A third alternative in this situation is an awake intubation under topical anesthesia followed by inhalation induction. Although this method requires some time and patient cooperation, securing the airway before induction of anesthesia affords an element of safety lacking in a mask inhalation induction. Less optimal, alternative approaches include a single shot spinal anesthetic (in the case of a prolapsed umbilical cord, performed with the patient in the lateral decubitus position) with simultaneous intramuscular ephedrine, or perseverance in securing peripheral or central venous access before induction. Although all of the previously mentioned approaches have significant limitations, one should at least acknowledge that a variety of options exist.

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(Accepted for publication September 10, 1997.)
set a precedent. Two dictums are relevant here. First, do not allow
a fetal disaster deteriorate into a maternal disaster. Second, it is
always preferable to give a dead baby to a living mother than to
give a dead mother to a living husband.

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(Accepted for publication September 10, 1997)

To the Editor — Although I read with interest the case report by
Schaut et al., their report raises the concern that inhalation induc-
tion with sevoflurane for emergency cesarean section should
be considered a “suitable alternative” when intravenous access is
not available.1 Whereas the authors endeavor to justify their decision,
they minimize the significance of the maternal risk involved. The
authors correctly state that the parturient undergoing emergency
cesarean section is considered to have a full stomach and acknowl-
dedge the risk for aspiration. However, they do not clarify that the
parturient has decreased lower esophageal sphincter tone and in-
creased intragastric pressure and that the stimulus of uterine traction
during cesarean section delivery places the parturient at extremely
high risk of regurgitation. Additionally, laryngeal reflexes are absent
during the stage of general anesthesia described in this case, and
spontaneous ventilation with an unprotected airway makes this pa-
tient particularly susceptible to aspiration.

The authors also contend that infiltration with local anesthetics
may take several minutes to accomplish and that the technique is no
longer taught in most obstetric residencies.1 However, this technique
is described in major obstetrics textbooks.2,3 Additionally, an informal
survey of staff obstetricians practicing at our institution revealed that
all are familiar with local anesthetic infiltration for cesarean section,
and most state that they would use this technique in an obstetrical
emergency. Although the authors described a case with good materi-
nal and fetal outcome, the risk involved and the potential for an
unfavorable outcome advocate against suggesting inhalation induc-
tion with sevoflurane as a “suitable alternative” for emergency cesar-
ean section.

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References


(Accepted for publication September 10, 1997)

To the Editor — We read the recent case report by Schaut et al.
(Anesthesiology 1997; 86:1392–4) describing a sevoflurane induc-
tion for emergency cesarean delivery. We cannot agree that the
approach described is a reasonable alternative. The choice of an
inhalation induction is not new to obstetric management and may
be warranted under some extremely rare situations; however, to
proceed without first establishing intravenous access seems to be
an unnecessary risk. Bonica’s classic text describes mask inhalation
induction with cyclopropane, and it is stated that “... when cesar-
ean section is planned, an endotracheal tube is introduced with the
aid of succinylcholine.”1 Anesthesiologists are experts at establish-
ing vascular access. An internal jugular or subclavian catheter can
be rapidly inserted, and a proper induction conducted. In addition,
the induction of general anesthesia, under any circumstance, should
not be undertaken without the application of routine monitors. If
the obstetrician is so desperately inclined to begin the operation,