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Lighting the way in emergency airway care

To the Editor:

There are a multitude of factors that contribute to difficult intubation under emergency conditions. One factor is airway soiling, especially with blood. Under normal conditions, illumination of the airway by the direct laryngoscope is enhanced by the reflection of the light off the mucosa. Airway illumination is decreased with airway blood soiling as there is increased absorption of the light cast from the laryngoscope by the dark stained mucosa. This is seen most commonly in patients with facial trauma, severe head injury, multiple trauma and upper gastrointestinal bleeding. Direct laryngoscopy has been popularly referred to as "black hole-oscopy" in this patient population and the most popular and effective adjunct to intubation in this setting has probably been a silent prayer said by the intubating physician.

I have found the lighted stylet to be a very effective aid to intubation in these patients. However, rather than use it to transilluminate the soft tissues of the neck, I have used it in conjunction with a direct laryngoscope. I mount the endotracheal tube on the lighted stylet and then perform direct laryngoscopy. The use of the lighted stylet allows for increased airway illumination and also allows for a focused beam of light to be directed at the targeted tissues. Visualization of the airway is much enhanced. I have used this technique myself for the last three years in the patients cited above and have commended it to others. I have been sufficiently impressed by their positive response to its application to feel a wider recommendation is perhaps in order.

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Laryngeal mask airway for endentulous patients

To the Editor:

Face mask ventilation of the edentulous patient is often difficult because of the inadequate fitting of the standard mask to the face.[1] It is common practice for one person to hold the mask with both hands over the patient's face while a second person ventilates the lungs by squeezing the bag.[2] The editorial of Dr. Fisher *et al.* suggests that the laryngeal mask airway (LMA) provides a better alternative to the standard face mask if the facial contours of the patient are not suited to the standard mask.[3] The LMA can therefore be utilized in the edentulous patient to circumvent the problem of face fitting and, when properly placed, the laryngeal opening will be totally within the rim of the mask.[4]

We have tried the LMA for ventilation of the anaesthetized edentulous patients. Following preoxygenation of the awake patient using a standard face mask, anaesthesia was induced. The LMA (size 3 or 4) was placed in position and its cuff inflated. The LMA was then connected to the anaesthesia circuit. The absence of teeth facilitated the insertion of the LMA. Also, there was no need for a bite block or an oral airway for protecting the LMA from damage by the patient's teeth. The LMA proved to be superior to the standard face mask/oropharyngeal airway system for maintaining a better seal in the edentulous patient. The technique can be used to ventilate the lungs of the anaesthetized and paralysed edentulous patient prior to tracheal intubation. It can also facilitate maintenance of anaesthesia whenever tracheal intubation is not indicated during surgery, while permitting the anaesthetist's hands to be free to perform other tasks such as drug administration or record-keeping.

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A combined ventilating-wedging device for the parturient

To the Editor:

The difficult airway in the obstetric patient is often unpredictable. In the obstetric population the risk of failed intubation has been reported to be as great as 1 in 300 undergoing Caesarean section,[1] which is almost eight times that in the general surgical patient population. There is also a relatively high incidence of "failed" intubation in obstetric patients as the *frequency* of emergency surgery can create hurried situations which may preclude a careful evaluation of the airway before induction. Tunstall[2] was the first to establish a "failed intubation drill" to assure maternal oxygenation and ventilation when intubation cannot be achieved. If intubation is unsuccessful and mask ventilation fails, one can support maternal oxygenation by performing a cricothyrotomy with a large gauge needle and transtracheal jet ventilation.

At our institution we have prepared for obstetrical emergency airway situations by equipping our operating rooms with a jet ventilator device which serves two important functions. The jet ventilator is attached via connecting tubing and a three-way stopcock to a 3000 ml/ irrigation bag[3] (Figure). When a patient for Caesarean section is brought to the operating room for surgery the bag is placed under the right hip and inflated using the jet ventilator to wedge the patient. "Wedging" the patient with this device ensures the jet ventilator is working properly and provides left uterine displacement (LUD) within seconds. In the event of a failed intubation, the device can be disconnected at the stopcock and used to ventilate the patient's lungs. Disconnecting with the stopcock in a closed position to the wedging device will maintain left uterine displacement during performance of transtracheal ventilation.

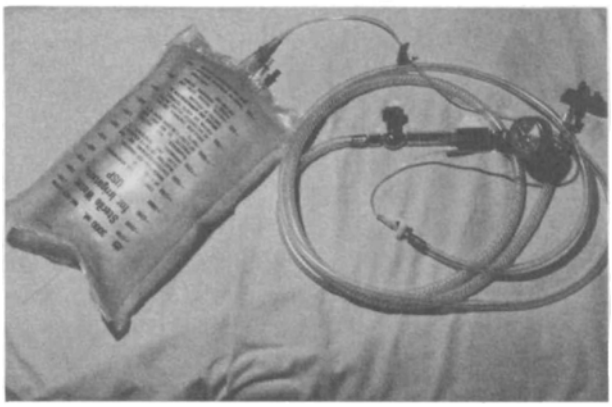

FIGURE Bivona Carden Intermittent Jetting Device connected to an inflated 3000 ml irrigation bag.

Utilizing such a set-up serves a dual purpose in the obstetrical patient. It very efficiently provides left uterine displacement which is essential in preventing aortocaval compression as well as functioning as a means of ventilation in an emergency airway situation.

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Anaesthetic management of a patient with Moyamoya disease for Caesarean section

To the Editor:

Moyamoya disease is a rare occlusive disease involving the large intracranial arteries and presents with ischaemic