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## Lighted Stylet and Endotracheal Intubation. I.

*To the Editor:*—The clinical trial of lighted stylet ("light wand") intubation reported by Fox *et al.*[1] provides further evidence of the usefulness of this device as a routine or alternative method of tracheal intubation. Their success parallels our own experience.[2] It was, however, with some dismay that we realized their trial made use of a Flexi-lum™ surgical light, rather than the device designed specifically as a lighted stylet.

Although the Flexi-lum™ (Concept Corporation, Clearwater, FL) was employed in earlier trials because nothing else was available, this surgical light was never intended to be used as a stylet. Its use carries at least one potentially serious complication. Several cases are known, and one is reported, of the bulb becoming disconnected from the wire of the Flexi-lum™ and falling into the right mainstem bronchus.[3] Dr. Fox and his colleagues refer to this report, but cite it as demonstrating the risk of trauma induced by nasotracheal intubation with the device. The report by Stone *et al.*[3] does not mention trauma, but, rather, documents a case in which the bulb became disconnected from the end of the surgical light and fell into the right lower lung of the patient. This problem, fortunately, has been solved by a recent redesign of the surgical light as an intubating stylet. The new lighted stylet (TUBE-STAT™, Concept Corporation, Clearwater, FL) has a brighter light, and its wire and bulb are enclosed together within a tough plastic sleeve. We have performed hundreds of intubations using the TUBE-STAT™ with no major complications, and we are currently investigating the use of a flexible lighted stylet designed specifically for nasotracheal intubation.

We very much welcome and appreciate the contribution of Dr. Fox and his colleagues to the growing evidence of the usefulness of the lighted stylet as a rapid and reliable method of orotracheal intubation. We would, however, caution against the use of the Flexi-lum™ surgical light as a stylet, and would recommend that the TUBE-STAT™, a device designed specifically for the task, be emloyed to perform the transillumination method of orotracheal intubation.

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## Lighted Stylet and Endotracheal Intubation. II.

*To the Editor:*—The recently published clinical report[1] comparing blind nasal intubation with oral intubation with the aid of the Flexi-lum™ light in awake patients stirs me to respond. Blind nasotracheal intubations with the aid of muscle relaxants have been carried out in our Department for about 20 yr by over 100 different anesthetists, and to be informed that it is necessary to have either spontaneous respiration or awake patients for this procedure is fallacious.

The Flexi-lum™ light has been used many times in the teaching of blind oral intubations using an Airway Intubator™[2] as a splint and guide. Should the authors wish to dramatically improve their intubation times, they should try this transillumination technique in conjunction

with the Airway Intubator™. Incidentally, only the lateral margins of this airway actually come in contact with the tongue; consequently, it is more readily accepted by the awake patient with minimal topical anesthetic preparation.

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*In Reply:*—We welcome the comments made by Drs. Stewart, Ellis, and Williams. Although we have never experienced any problems using the Flexi-lum™ surgical light, we agree with the recommendation by Drs. Stewart and Ellis that the TUBE-STAT™ intubating stylet be used in place of the Flexi-lum™ surgical light for lightwand intubations. The TUBE-STAT™ was not yet available when we began our study.

Ellis *et al.* found the lightwand method of endotracheal intubation to be comparable with direct laryngoscopy in patients who have been given muscle relaxants.[1] Our investigation emphasized the advantages of lightwand orotracheal intubation over blind nasotracheal intubation in awake patients. Particular emphasis was placed upon the utility of this technique in the patient with a known or suspected difficult airway. Most anesthesiologists would elect not to paralyze these patients until the airway has been secured.

Dr. Williams takes issue with our suggestion that blind nasotracheal intubation requires a spontaneously ventilating patient.[2] We did not mean to imply that blind nasotracheal intubation is impossible in an apneic patient. However, the standard of practice at our hospital is to perform the intubation with the patient either awake or anesthetized with spontaneous respiration. Muscle relaxants are used only if the glottis is to be directly visualized. A review of several standard anesthesia textbooks produces no discussion of, and certainly no advocacy for, blind nasotracheal intubation in the patient who has received muscle relaxants. Indeed, Stoelting states that ". . . maintenance of spontaneous ventilation of the lungs is essential to identify the glottic opening" for blind nasotracheal intubation during anesthesia.[3] Collins states that "It is generally required . . . that the patient be breathing spontaneously" and "(O)ther requirements for successful blind intubation are hyperpnea and intubation during expiration."[4] Obviously, these conditions do not exist in a patient who has received muscle relaxants. We draw attention to the comments of these authors, not to dispute Dr. William's record of success with this technique, but to emphasize that our suggestion is consistent with the current standard of practice.

There are many ways to approach the patient with a difficult airway. The oral lightwand is a useful technique which is easily mastered.

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