Videolaryngoscope-assisted nasotracheal intubation: Another option!

Madam,

We read with interest the article on Truview PCD-video laryngoscope (VL) aided nasotracheal intubation (NTI) in cases series of orofacial malignancy with limited mouth opening by Patil et al.[1] We appreciate their use of Truview PCD VL for NTI in orofacial malignancy.

Despite the recent advances in airway management, NTI in oral and maxillofacial surgeries remains challenging. Submandibular stiffness, decreased mouth opening, and associated deformities of facial structures limit the available choices for airway management.[2] Traditionally, NTI was done blindly, with the assistance of conventional laryngoscope or through fiberoptic bronchoscope. All these have their own problems as mentioned by the author.[2] VL (Truview, Glidescope, etc.) have been recently described for NTI.[1,3] However, a good glottic view with VL does not guarantee an easy intubation.

These patients may have a large mass or raw area which may be traumatized with the use of equipments such as Magill’s forceps and bougie (used by author).[2] We have done more than 30 Glidescope-assisted NTI in such patients with cuff inflation technique. We inflate the cuff of endotracheal tube with 15–20 mL of air as soon as it crosses the nasopharynx to guide its tip toward glottis [Figure 1].[3,4] We could intubate all our patients in a single attempt (even with 1.6 cm mouth opening) and believe that use of cuff inflation can be a good adjunct to VL for NTI in patients with orofacial malignancy.[3] The only limitation of NTI with VL is that mouth opening of the patient should be at least 1.5 cm (but definitely less than conventional laryngoscopy) for insertion of VL blade.

Figure 1: The cuff inflation guides the endotracheal tube into glottis
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Conflicts of interest
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Nishkarsh Gupta, Anju Gupta
Department of Onco Anesthesia and Palliative Medicine, DRBRAI-RCH, AIIMS, 1Department of Anesthesiology and Intensive Care, VMMC and Associated Safdarjung Hospital, New Delhi, India

Address for correspondence: Dr. Nishkarsh Gupta, 437 Pocket A, Sarita Vihar, New Delhi, India. E-mail: drnishkarsh@rediffmail.com

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Venous air/oxygen embolism due to hydrogen peroxide in anal fistulectomy

Hydrogen peroxide, an oxidizing agent, is frequently used in the cleansing of wound due to its germicidal properties. It is also used by surgeons in anal fistulectomy to locate the internal opening of the fistula in addition to its action in bubbling out foreign materials and debris. However, it may lead to air/oxygen embolism when irrigated into a closed body cavity.

Here, we present a case of air/oxygen embolism due to hydrogen peroxide in anal fistulectomy that was managed successfully.

A 39-year-old male ASA 1 was scheduled to undergo anal fistulectomy. Saddle block anesthesia was provided using 1.2 ml of 0.5% hyperbaric bupivacaine. After 15 minutes of saddle block, the patient was put in the lithotomy position. Per rectal examination was done by the surgeons. The external opening was at six o’clock position and the internal opening could not be felt. The external fistula opening was probed with a lubricated blunt malleable fistula probe that could be pushed up to 2 cm in intersphincteric plane. He remained hemodynamically stable. The probe was removed and a 6 FG feeding tube was inserted through the external opening into the tract and 10 ml of 1.5% hydrogen peroxide was pushed with the aim to locate the internal opening. The internal opening could not be located and hydrogen peroxide did not return from the external opening as well.

At this time, suddenly the patient developed respiratory distress with the respiratory rate at 40/min and started coughing. He started complaining of chest pain which was crushing in character. Heart rate increased from 80/min to 140/min and blood pressure fell to 90/60 mm Hg. EtCO₂ decreased from 35 to 20 mm Hg and oxygen saturation fell to 85%. Chest auscultation revealed bilateral bronchospasm. The operative procedure was deferred and the patient was put in the Trendelenburg position with 100% oxygen. Sublingual sorbitrate was given and hydrocortisone 100 mg and deriphyllin were administered intravenously. In view of non-return of hydrogen peroxide from the fistula tract, the possibility of air/oxygen embolism was considered. Within 15 minutes, urgent transthoracic echocardiography using a portable ultrasound machine was done which showed air in the right atrium confirming the diagnosis of embolism [Figure 1].