

A comment on - “Lung isolation for lobectomy in elderly, post-radiation fibrosis of a difficult airway - pediatric double-lumen tube and pediatric ureteroscope as rescue devices”

Sir,

I read with great interest, the article by Gupta *et al.* on “Lung isolation for lobectomy in elderly, post-radiation fibrosis of a difficult airway – pediatric double-lumen tube and pediatric ureteroscope as rescue devices.”^[1] I, hereby, congratulate the authors for the innovative use of ureteroscope for the confirmation of the position of 28 F double-lumen tube (DLT). However, I wish to share a concern regarding the management of the case. The patient was a known case of hypopharyngeal cancer and had received irradiation to the neck. Radiation results in extensive fibrosis in the neck, losing the suppleness of the tissues in submandibular and submental space, thus making visualization of larynx difficult. Moreover, lymphatic drainage of the larynx was affected resulting in glottic edema and reduction in the glottic opening. Besides, this patient had restricted mouth opening and limited neck extension. By all means, the patient was a case of an anticipated difficult airway, which was also confirmed upon direct laryngoscopy. The insertion of a single lumen tube followed by the use of bronchial blocker (BB) would have been ideal for this patient. DLT is difficult to insert due to its large external diameter and fixed curvatures. In this case, where the airway was difficult, repeated attempts were made to insert DLT. Repeated attempts can worsen the glottic edema by trauma to the tissues. Reluctance to use BB is common worldwide. Surveys on the practice of thoracic anesthesia have shown that the use of BBs is negligible as compared to the use of DLTs.^[2,3] DLT carries certain advantages such as lesser time for insertion, better access to both lungs, and lesser incidence of intraoperative displacement. However, a meta-analysis comparing the use of DLT and BBs in thoracic surgeries has shown that the quality of lung collapse had been comparable with the use of both devices. Further, DLTs were associated with a significantly higher risk of airway injuries as compared to BBs.^[4] Better designs and materials have made the BBs as reliable as DLTs. Still, it is a matter of concern that many thoracic anesthesiologists are biased in their preference for lung isolation devices.

Lung isolation in a patient with anticipated difficult airway is a classical indication for the use of BB.^[5] In this case, after inserting a single lumen tube, a bronchial blocker could have been inserted into the left mainstem bronchus. An advantage with the blocker is that it can be passed extra-luminally i.e. outside the tube. This method is particularly useful when a pediatric bronchoscope is not available. An adult bronchoscope can be passed through the endotracheal tube to confirm the location of BB passed extra-luminally.

In conclusion, judicious selection of lung isolation devices is a key to success for safe and effective thoracic anesthesia.

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Conflicts of interest

There are no conflicts of interest.

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