Congenital lobar emphysema: Intubation and ventilation strategies

Sir,

The case report entitled "congenital lobar emphysema: A modified approach to anesthetic management" by Nandihalli *et al.*^[1] made for interesting reading. Tracheal intubation at the time of anesthetic induction and the subsequent ventilation strategies are the cornerstone of successful anesthetic management of such cases and may influence the outcome. We would like to make certain observations on the described management of this case.

In the abstract, they have written that they adopted gentle manual ventilation maintaining the airway pressure before thoracotomy as described by Cote and Payne *et al.* This fact has been repeated in the discussion section also. In the case report, it has been mentioned that deliberate endobronchial intubation was performed and intermittent positive pressure ventilation (IPPV) was carried out using low tidal volumes (4–6 ml) on pressure regulated volume control mode. Later on they went on to conclude that "if IPPV is necessary, gentle manual ventilation or pressure controlled ventilation with a pressure limit of 20–25 cm of H_2O can be carried out until thoracotomy". To us it is not clear actually which ventilation mode was applied. We would also like to know the names of the breathing circuit and the anesthesia workstation that was used to manage this case because that will give a clue to the method employed.

Deliberate endobronchial intubation using a tracheal tube is described in literature. However, some important measures from the safety point of view should be kept in mind. In children, it is suggested to use a tracheal tube 0.5–2.0 mm smaller in diameter than recommended for the particular patient.^[2] Their patient was somewhat older at presentation as he was symptom free till the age of 9 months and a tube of 4.5 mm internal diameter was used. Another issue that should be kept in mind with right endobronchial intubation is the possible blockage of the right upper lobe bronchus by the tube.

Different ventilation strategies for management of such cases are well known. There is nothing new in their description of endobronchial intubation, gentle manual ventilation or pressure regulated volume controlled ventilation that has been already described in literature.^[3] So, it is not clear what modification was employed in their management as suggested by the title of the case report.

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References

- Nandihalli MC, Thammaiah SH, Kotekar N, Putran PR. Congenital lobar emphysema: A modified approach to anesthetic management. Indian J Crit Care Med 2015;19:47-9.
- Dorsch JA, Dorsch SE. Lung isolation devices. Understanding Anesthesia Equipment. 5th ed. Philadelphia: Wolters Kluwer/Lippincott Williams and Wilkins; 2008. p. 633-58.
- Tempe DK, Virmani S, Javetkar S, Banerjee A, Puri SK, Datt V. Congenital lobar emphysema: Pitfalls and management. Ann Card Anaesth 2010;13:53-8.

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