

## CORRESPONDENCE

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## Atelectasis during Anesthesia

*To the Editor:*—Recently, Ding and White described a patient in whom lung collapse after induction of anesthesia occurred in a healthy outpatient and further reported that the right mainstem bronchus obstruction secondary to mucous plugging during induction has not been reported previously.<sup>1</sup>

We would like to comment on two points. First, in reviewing the English language literature, we find eight episodes of pulmonary collapse during anesthesia attributable to mucous plugging of the bronchi following tracheal intubation in five reports published after 1942.<sup>2-6</sup> Furthermore, one additional report<sup>7</sup> indicated that the probable cause of atelectasis in five cases during anesthesia was excess mucus in the bronchi. Parenthetically, pulmonary collapse due to nasal discharge, nasopharyngeal tissue, blood, clot, or mucus following nasal tracheal intubation has been reported sporadically. Thus, pulmonary collapse during anesthesia due to mucus is not uncommon.

Second, we would like to comment on the treatment of pulmonary collapse. In the reported case,<sup>1</sup> the authors state that they easily passed a suction catheter through the tracheal tube but were unable to suck out any secretions. We presume that they used a straight-type suction catheter, which would easily pass into the left mainstem bronchus rather than the right mainstem bronchus when marked mediastinal shift to the right developed due to collapse of the right lung.

We developed a technique for blind selective bronchial suctioning in the adult and in infants and children using a curved-tipped catheter with a guide mark<sup>8-11</sup> and have successfully treated pulmonary atelectasis of the middle lobe and lower lobes, during anesthesia and the postoperative period without using fiberoptic bronchoscopy or rigid-type bronchoscopy.<sup>12-14</sup> However, our catheter cannot reach the bronchi of the upper lobes, because of the anatomy of the bronchi of the upper lobes. Therefore, one cannot treat atelectasis or pneumonia of the upper lobes using our technique. We also developed a J-shaped catheter tip and a guide mark for this purpose that has been used to successfully treat atelectasis of the upper lobes.<sup>15,16</sup>

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