



The history of anesthesia for thoracic surgery: some remarks

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Dear Editor,

It was with great interest that I read the review by J. Brodsky and M. Lemmens on "The history of anesthesia for thoracic surgery".¹

The authors must be credited for presenting physiologically well-founded facts and for providing rare contemporary photographic material. They must also be recognized for discussing clinically deplorable and ill-advised methods of tackling the issue of gas exchange during surgery in the open thorax, like Sauerbruch's negative pressure chamber. The positive pressure head-box in Figure 2 is erroneously ascribed to the German internist Brauer, and notwithstanding the striking similarity, the device of 1905 must be credited to Murphy.²

In the section discussing positive-pressure ventilation, the authors refer to O'Dwyer's and Fell's tubes intended for the delivery of artificial ventilation into the airways as "tracheal tubes." However, these were actually laryngeal tubes, whose conical tips were intended to provide an airtight fit in the

larynx by resting on the false cords. By the mere dimensions of the detachable tips displayed in Figures 3 and 4, the laryngeal tubes could never have been forced to pass beyond the cricoid cartilage and to enter the trachea.²

The authors delineate the evolution of mechanical ventilation from the intensive care ward of the great poliomyelitis epidemic, to the thoracic theatre. The device employed by Björk *et al.*, after successful use in the postoperative ventila-



Figure 1.—The Engström volume-controlled respirator connected by a cuffed tracheostomy cannula to a patient suffering from respiratory insufficiency on the second postoperative day after extensive resectional surgery on the left lung³ (Permission by publisher).



Figure 2.—The Engström respirator as used for anesthesia was equipped with a rotameter block for delivery of oxygen and nitrous oxide to the semi-open breathing system⁵ (Permission by publisher).

tion of thoracic surgical patients, was the Engström volume-controlled ventilator.³

The sequence of events is given with singular lucidity. However, in Figure 9's photograph of the 1951 Engström ventilator used by Björk *et al.*, the authors erroneously present the Engström ER 311 anesthesia ventilator. This ventilator was not available earlier than 1968,⁴ and thus certainly could not have been employed by Björk in 1955. To correct the mistake, I would like to submit photographs of the intensive care and the anesthesia versions of the Engström ventilator³ (Figures 1,2) that were concomitantly used by Björk *et al.*⁵ I hope to make this material available to this review's readers,¹ as its original sources will become ever more inaccessible with time.

References

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Received on November 16, 2007 - Accepted for publication on February 21, 2008.

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