

# MS#16

## **Tracheal intubation in daylight and in the dark: a randomised comparison of the Airway Scope Airtraq, and Macintosh laryngoscope in a manikin**

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15 anaesthetists attempted to intubate the trachea of a manikin lying supine on the ground using the Airway Scope, Airtraq or Macintosh laryngoscope in three simulated conditions: (1) in room light; (2) in the dark and (3) in daylight.

The main outcome measure was the time to ventilate the lungs after successful intubation; the secondary outcome was the success rate of ventilation within 30 s. In room light and in the dark, ventilation after successful tracheal intubation could always be achieved within 30 s for all three devices.

There were no clinically meaningful differences in time to ventilate between the three devices. In daylight, time to ventilate the lungs for the Airway Scope was significantly longer than for the Macintosh blade ( $p < 0.0001$ ; 95% CI for difference 27.5–65.0 s) and for the Airtraq ( $p < 0.0001$ ; 95% CI for difference 29.2–67.6 s).

**Ventilation was always successful for the Macintosh and Airtraq laryngoscopes, but for the Airway Scope, only one of 15 participants could successfully ventilate the lungs ( $p < 0.0001$ ).**

Therefore, the Airway Scope may have a role for tracheal intubation under room light or in darkness, but may not be so useful in daylight. **In contrast, the Airtraq may have a role in both darkness and daylight.**