

# MS#13

## **Comparison of use of the the Airtraq with direct laryngoscopy by paramedics in the simulated airway**

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Thirty paramedics participated in this study. The participants then managed the following four scenarios on a Laerdal SimMan manikin placed supine on the floor..

For **Scenario 1 (Normal Airway 1)**: there were no significant differences in either the number of attempts or the time to ventilation between the devices.

For **Scenario 2 (Tongue Edema)**, the mean time to ventilation was significantly faster, and fewer intubation attempts were observed with the Airtraq when compared with DL.

For **Scenario 3 (Cervical Spine Immobilization)**, there were no significant differences in number of attempts and time to ventilation. Six participants had fewer attempts with the Airtraq.

**Scenario 4 (Normal Airway 2)** demonstrated significantly less time to ventilation and fewer intubation attempts with the Airtraq. A significant decrease in time to ventilation was observed with the Airtraq when comparing scenarios 1 and 4.

**Conclusions.** The Airtraq was shown to be equal to or faster than DL. The Airtraq has a rapid learning curve demonstrated by a significantly decreased time to ventilation between scenarios 1 and 4. We found the Airtraq Optical Laryngoscope to be equal to or faster than DL in simulated easy and difficult airway scenarios. **This device appears to have a rapid learning curve after minimal training and may be useful as a primary or backup device for out-of-hospital endotracheal intubation.** Although the Airtraq shows promise, it is not known how the device will perform in the clinical out-of-hospital environment. Our findings will need to be verified with prospective clinical trials.