

# MS#18

## *Comparison of the Airtraq® and Truview® laryngoscopes to the Macintosh laryngoscope for use by Advanced Paramedics in easy and simulated difficult intubation in manikins*

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**Background:** Paramedics are frequently required to perform tracheal intubation, a potentially lifesaving manoeuvre in severely ill patients, in the prehospital setting. However, direct laryngoscopy is often more difficult in this environment, and failed tracheal intubation constitutes an important cause of morbidity. Novel indirect laryngoscopes, such as the Airtraq and Truview laryngoscopes may reduce this risk.

**Methods:** The authors compared the efficacy of these devices to the Macintosh laryngoscope when used by 21 Paramedics proficient in direct laryngoscopy, in a randomized, controlled, manikin study. Following brief didactic instruction with the Airtraq and Truview laryngoscopes, each participant took turns performing laryngoscopy and intubation with each device, in an easy intubation scenario and following placement of a hard cervical collar, in a SimMan manikin.

**Results:** The Airtraq reduced the number of optimization manoeuvres and reduced the potential for dental trauma when compared to the Macintosh, in both the normal and simulated difficult intubation scenarios. In contrast, the Truview increased the duration of intubation attempts, and required a greater number of optimization manoeuvres, compared to both the Macintosh and Airtraq devices.

**Conclusion:** The Airtraq laryngoscope performed more favourably than the Macintosh and Truview devices when used by Paramedics in this manikin study. Further studies are required to extend these findings to the clinical setting.