

MS#8

A comparative study of Endotracheal Intubation by Airtraq, Glidescope ranger and Direct Laryngoscopy in a Closed Space Environment.

Annals of Emergency Medicine S113, Volume 52, No 4 October 2008.

Uniformed Services Health Education Consortium, San Antonio, TX

A randomized crossover study was employed to assess the 3 methods of endotracheal intubation on a mannequin secured to the lowest stanchion position of a **UH-60 Blackhawk helicopter** airframe model.

Airtraq (mean = 2.885) was least difficult when compared to GSR (mean = 3.615, $p = 0.252$) and DL (mean = 5.145, $p = 0.0041$).

Intubation times were also improved for the ATQ compared to DL (AT = 23.810s vs. DL = 39.145s, $P = < 0.0001$) and GSR (GSR = 39.295s, $p = < 0.0001$).

Both ATQ and GSR provided significant improvement to CLV as rated by study subjects ($p = 0.0006$ and $p = 0.0047$, respectively).

Conclusion: The GlideScope Ranger and Airtraq devices enhanced CLV in the closed space setting, and the Airtraq reduced perceived degree of difficulty and reduced time to intubation.