Bougie Through i-gel® Technique for Endotracheal Intubation on Cadavers

Shannon Thompson, MD, MAEd; Jennifer Achay, AS, NRP; Rachel Ely, DO, MHA, NRP; Stephen Rahm, NRP; Karl Kmiecik, MD; Eric Elizondo, NRP; David Wampler, PhD, LP, FAEMS; Craig Navarijo, LP; Christopher Hewitt, DO
Disclaimer

• The views expressed are those of the presenters and do not reflect the official views or policy of the Department of Defense or its Components.

• The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02_AFI 40-402.
Background
The first-pass success rate for endotracheal intubation using a bougie-through i-gel® technique will be approximately 70%.

There will be no difference in first-pass success between the uncomplicated or complicated airway.
Methods

- Block randomized crossover study with 2 groups
- Primary outcome was first pass success at intubation
- Complicated airway simulated by c-collar as in a previous study
- Exit survey completed after trials
Results

• 25 paramedics from two fire-based EMS agencies participated.
• The mean years of experience was 4.6 (95% CI 2.3 to 6.8).
• The first-pass success rates for the uncomplicated and complicated airway were 88% (22 of 25) and 76% (19 of 25), respectively.
• Twenty-one (84%) of participants reported 0-5 uses of the i-gel® previously.
• There was no difference found in success rate between the uncomplicated and complicated airways (p=0.45). There was also no difference in overall success rate between randomization groups (p=0.467).
Discussion
Conclusion

• Paramedics using the bougie-through i-gel® technique on cadavers had similar first-pass success rates when compared to previous studies and between uncomplicated and complicated groups.

• The study was not powered sufficiently to compare study first pass success to the population first pass success rate.

• Further research is needed to determine if this technique is applicable to prehospital patients as this was a laboratory study on cadavers.


References


References


