A534 - A comparison of the intersurgical i-view and macintosh laryngoscope when used by novice personnel: a manikin study

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Introduction:
Direct laryngoscopy as a technique for tracheal intubation is a potentially lifesaving procedure that healthcare professionals in a variety of fields are taught. However, this skill is challenging to acquire and difficult to maintain. Poorly performed intubation technique can lead to potentially serious complications. The Intersurgical iView video laryngoscope is a new intubation tool which may have advantages over direct laryngoscopes, such as the Macintosh, in the hands of novice personnel.

Methods:
A prospective randomised counterbalanced trial of 30 medical students, who did not have previous airway management experience, was conducted. Each student received brief didactic teaching, following this, participants were directly supervised performing laryngoscopy and intubation using the Macintosh and iView devices in an alternating pattern. Students were permitted up to three attempts to successfully intubate under four conditions, three laryngoscopy conditions using a Laerdal Intubation Trainer and one using a Laerdal SimMan Manikin.

Results:
There was no significant difference in the success rate of intubation or time to intubation between the two devices. The iView outperformed the Macintosh in time to intubation in the normal airway in the final scenario, once students gained experience with both devices. No significant difference was found in the number of optimisation manoeuvres, or intubation attempts between groups. Areas where the iView outperformed the Macintosh included severity of dental trauma and participants’ perception regarding ease of use of the device.

Conclusion:
The iView may prove to be a useful teaching tool for novice personnel who are acquiring the skills of tracheal intubation.

References: