

Resource Summary Report

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The protocol for the mannequin crossover trial entitled "Comparison of video and conventional laryngoscopes for simulated difficult emergency tracheal intubations in presence of liquids in the airway"

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Protocol Information

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Authors: Kei Suzuki, Shinji Kusunoki, Takuma Sadamori, Yuko Tanabe, Junji Itai, Nobuaki Shime

Summary: The objective of this protocol was to compare the Airway Scope™(AWS) and the Macintosh laryngoscope (ML) for their performance in tracheal intubations (TIs) performed by emergency medical technicians (EMTs) using mannequin models with liquids in the airway. Rice gruel and mock blood were used to fill the upper airways of mannequins to create mock vomit and hematemesis models, respectively. TIs were performed by certified EMTs after visualizing the glottis using an AWS with an 18-Fr suction catheter and a ML with an 18-Fr suction catheter. TIs with AWS and ML were performed in random order in a comparative crossover trial. The TI success rate was evaluated based on the following: (a) the time taken from laryngoscope insertion into the oral cavity to glottis visualization, tracheal tube passage through the glottis, until the initiation of ventilation and (b) the subjective level of difficulty, which was assessed using a visual analog scale (VAS).

Associated Publications: Suzuki K, Kusunoki S, Sadamori T, Tanabe Y, Itai J, Shime N (2019) Comparison of video and conventional laryngoscopes for simulated difficult emergency tracheal intubations in the presence of liquids in the airway. PLoS ONE 14(7): e0220006. doi: [10.1371/journal.pone.0220006](https://doi.org/10.1371/journal.pone.0220006)

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