

Use of tea trolley training to improve hyperangulated videolaryngoscopy skills in response to a difficult airway case

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Background

The management of expected difficult airways has been transformed by the availability of videolaryngoscopy, and more recently hyperangulated videolaryngoscopy. A frequent criticism of hyperangulated videolaryngoscopy is being able to obtain a good view of the glottis but being unable to intubate[1]. 'Tea trolley training' is a relatively recent concept which has been shown to be an effective and efficient method of enhancing the skills of a large number of individuals in a relaxed, low fidelity environment[2].

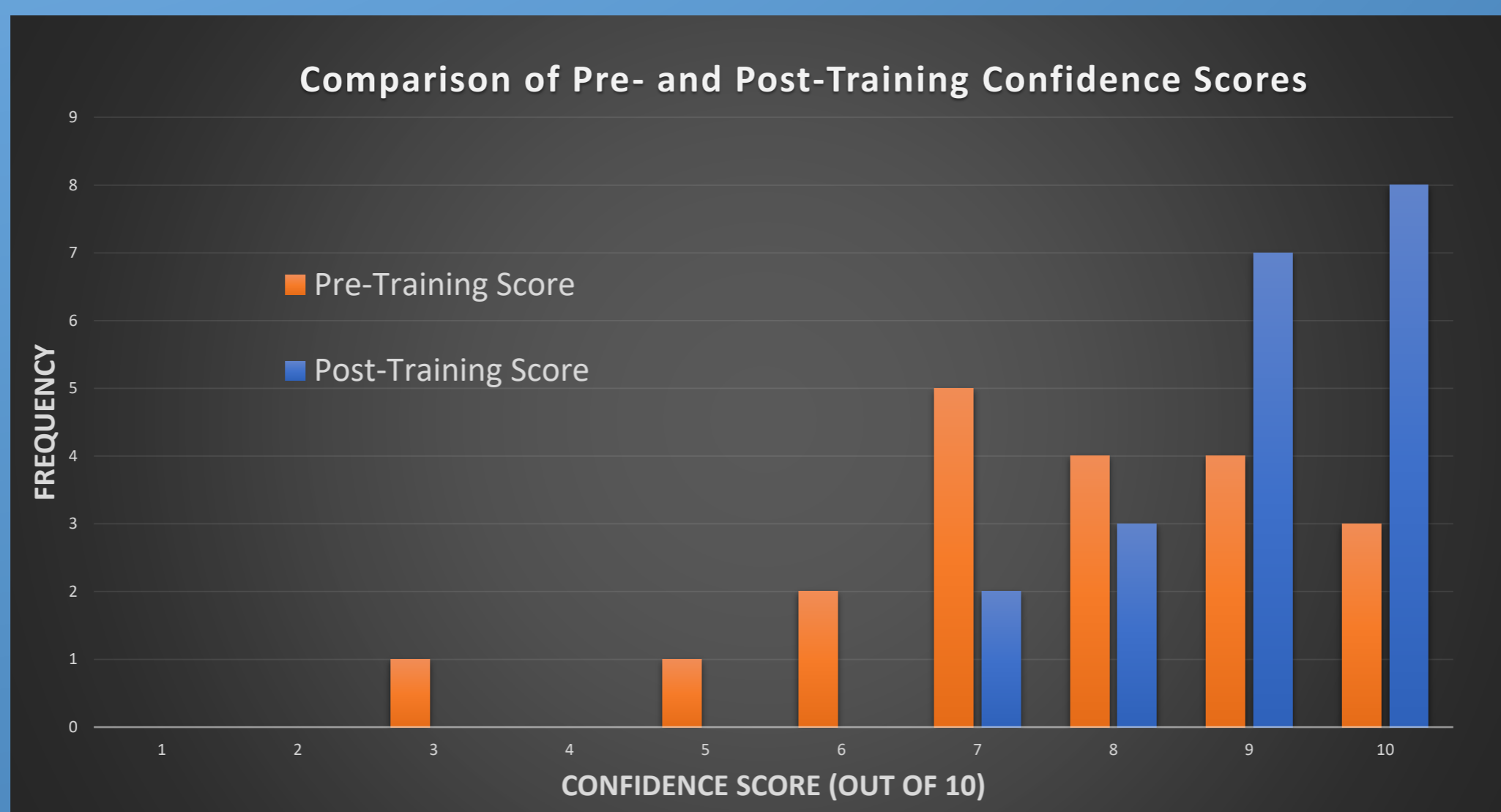


Method

Following a difficult airway experience, a tea trolley training programme was implemented to improve skills and familiarity with hyperangulated videolaryngoscopes across our department. We conducted a short simulation session using the C-MAC® D-Blade (Karl Storz GmbH, Tuttlingen, Germany), using didactic teaching of optimal techniques followed by hands-on manikin simulation. We asked attendees to conduct a pre- and post-training survey to assess their confidence and preferred troubleshooting techniques in the event of difficulty.

Results

Over four sessions, 20 anaesthetists were trained, varying in experience from novice trainees to consultants. Prior to the training session, each participant was asked to self-assess their confidence using the D-Blade on a numeric scale from one to ten. Before training, 35% of participants (7/20) reported high confidence using the D-Blade (>8/10 self-assessment score). Following the training, this score improved to 75% (15/20), with a mean confidence improvement of 24% from their matched pre-training scores. Most participants (80%) were keen for further similar teaching of advanced techniques.



Discussion

Different techniques are required when using hyperangulated blades to avoid instances of being unable to intubate despite a good view of the vocal cords. Tea trolley training is an effective, time-efficient method of teaching these techniques across departments with good reproducibility. In this scenario, it has led to a marked improvement in anaesthetists' confidence in using hyperangulated videolaryngoscopes, as well as increase their ability to troubleshoot difficulties which may be encountered.

References

1. Reynolds, E., Crowther, N., Corbett, L., et al, *Improving laryngoscopy technique and success with the C-MAC® D blade: development and dissemination of the 'Bath C-MAC D blade guide'* British Journal of Anaesthesia; 2020; **125**: e162 - e164 <https://doi.org/10.1016/j.bja.2019.12.024>
2. O'Farrell, G., McDonald, M. and Kelly, F.E., 'Tea trolley' difficult airway training Anaesthesia;2015; **70**: 104-104. <https://doi.org/10.1111/anae.12964>

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