

The Vortex Approach

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During the stress of managing an airway crisis, omissions of basic rescue strategies and fixation errors continue to occur, even amongst experienced anaesthetists¹.

Conventional branching, algorithmic cognitive tools tend to be too complex and information dense to be utilised in “real time” during the stress of a time critical emergency². Additionally difficult airway algorithms tend to focus on circumstances when the primary intended airway is an endotracheal tube when, in fact, the primary intention in many elective anaesthetics is to place a laryngeal mask. As such, these algorithms may not meet the needs of clinicians and facilitate the effective management of an airway crisis .

The Vortex Approach³ is a novel cognitive tool for difficult airway management developed with attention to recognised challenges of emergency airway management identified in the literature and from observation of clinicians in simulated clinical emergencies. Having been specifically designed for use in the context of an airway emergency the Vortex Approach incorporates principles of teamwork and human factors in combination with a formal training program. This makes it more closely aligned with the recognised qualities of an ideal cognitive tool². The result is a cognitive tool that is simple enough to be utilised during the stress of an airway crisis and flexible enough to be implemented in any context in which an airway crisis might arise - not only by anaesthetists but by all clinicians whose role includes advanced airway management.

Conventional difficult airway algorithms alone do not adequately address the challenges faced by clinicians when managing a high-stakes, time-critical event such as an airway crisis. The Vortex Approach aims to facilitate the prevention & management of airway emergencies through the use of a novel cognitive tool that can be used as an adjunct to the conventional airway algorithms, supported by an interprofessional team-based training program.

References:

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