Continuing Medical Education Program

Introducing yourself to the Evolution of the Individualized Airway Algorithm

T. Straker M.D., M.P.H.
A. Bastien M.D.
V. Joseph, M.D., M.P.H.

Montefiore Medical Center, Bronx, New York

Introduction

The goal of this abstract is to introduce a continuing medical education program for the maintenance of difficult airway competency based on expertise. Rather than following the Benumof difficult airway algorithm, we also demonstrate how each individual can develop his own personalized difficult airway algorithm. This process requires recognizing one’s limitations and skill level. Individuals intuitively conduct this process during management of difficult airway situations and rely on their own comfort and skill based algorithm as opposed to the nationally recognized difficult airway algorithm.

Methods

Practice based learning and improvement involves systematic monitoring of one’s outcomes, benchmarking these with national or regional data, identifying gaps between one’s performance and benchmarking information, developing personal learning projects and acquiring new knowledge skills to bridge these gaps, applying the knowledge to one’s practice, and again monitoring one’s outcomes in a cycle of continuous quality improvement. This cycle is illustrated in Fig. 1.1

The skills of attending anesthesiologists at a university healthcare network are assessed. A self-assessment questionnaire and a theory based airway examination are given to the individual asking their level of experience with a particular piece of equipment. Once the self-assessment questionnaire and theory-based examination are implemented, a validation tool is administered to the individual. This is a real time difficult airway scenario that is given on a mannequin simulator. The purpose of this validation tool is to confirm the results of the self-assessment questionnaire. Based on this information, an objective analysis was performed and a curriculum devised for each person utilizing as its core the weaknesses that are identified. A skill directed workshop utilizing a mannequin simulator and a dog laboratory for surgical airway practice are integral components of the curriculum. Each individual must demonstrate at the end of the curriculum competence exhibited by 1- post curriculum self-assessment questionnaire and theory based airway examination 2- workshops and continuing medical education credit 3- dog laboratory for securing surgical airway 4- credentialing booklet dictated by the number of successful repetitions referenced in the literature for a particular adjunct and 5- mechanisms for tracking progress based on clinical performance 6- performance evaluations 7- objective structured assessment of technical skills and 8-portfolios. This is illustrated in Box 2.

Discussion

Effective educational interventions should help promote changes in the performance of physicians. In the field of continuing education, a variety of strategies have been found to encourage the integration of new knowledge and skills into practice and reinforce learning. Research has shown that pure didactic sessions are not as effective in changing physicians’ behaviors as experiential sessions.3 Realistic competency skills are acquired and can be disseminated from faculty to the residency and throughout the institution.
Fig. 1. Practice-based learning and improvement and patient safety in surgery.

References

