

Archives of Anesthesiology and Critical Care (Autumn 2021); 7(4): 203-204.

Available online at http://aacc.tums.ac.ir



Consensus Report: The Current Status of Airway Assessment

Zahid Hussain Khan

Department of Anesthesiology and Intensive Care, Imam Khomeini Hospital Complex, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

ARTICLE INFO

Article history:

Received 09 August 2021 Revised 30 August 2021 Accepted 14 September 2021

Keywords:

Consensus report; Airway assessment

It is widely reckoned that the human airway is an inhospitable terrain, and without a proper airway assessment, embarking on induction of anesthesia becomes a deadly vendetta. Difficult laryngoscopy, intubation and mask ventilation following induction continue to harass the anesthesiologists worldwide, and are unequivocally regarded as the major causes of anesthetic related morbidity and mortality.

The incidence cited in the books is only the tip of the ice-burg as many cases are not reported and many countries do not have a reliable database and databank or else are wary of issuing the correct figures.

The existing bedside airway assessment tests such as Patel's measurement of the thyromental distance [1], the Mallampati test [2], and the Wilson scoring system [3] have all been shown in various studies to have high false positive rates, which obviously commutes from their clinical utility. In addition, other such tests, modifications and scoring systems have been evolved and evaluated in different randomized clinical trials to help us in providing a solution to the ever present risk of encountering a difficult airway and managing it successfully, but it seems that a logical and a practical panacea is a distant and perhaps a fond hope. A test that could help us to overcome the conundrum of the airway difficulties is the need of the hour, but at present no single test is available

or in the offing to guarantee us a relatively greater success in assessing the airway with greater accuracy.

The upper lip bite test introduced recently as a simple new technique by khan et al [4] assesses a combination of jaw subluxation and the presence of buck teeth simultaneously obviously enhancing its predictive value and reliability. Exposure of the glottis predominantly depends on forward protrusion of the mandible which requires adequate and proper physiological functioning of the temporomandibular joint. The upper lip bite test adequately addresses this issue as well thus providing sufficient authenticity to the test when used alone as an airway screening test. Multivariate composite risk indexes [5-6] appear to be promising but results so far published have not been convincing to achieve tentative data in terms of high sensitivity, specificity and minimal false positive and false negative outcomes.

In search for further credibility and reliability, the anesthesiologists recently have veered from simple airway assessment tests to more sophisticated means employing magnetic resonance imaging, computed tomographic scanning and sonographic techniques in the hope of getting a true picture of the airway. But such tests not only entail time but are cost effective and thus detract from their usefulness.

Although fiberscope is a distinct improvement in airway management, it is not a garden hose you can tum

The authors declare no conflicts of interest.

*Corresponding author.

E-mail address: khanzh51@yahoo.com





204 Khan.: Airway Assessment ...

on and off, and furthermore does not give you the guarantee that nothing will go wrong.

I personally would err on the side of boldness, not on the side of caution in most matters of life, but while assessing the airway I would observe all the precautions and go ahead gingerly since to me airway is the darkest Africa with much of it unknown and untouched hitherto.

References

- Patil VU, Stehling LC, Zaunder HL. Fiberoptic endoscopy in anesthesia. Chicago. Year Book Medical Publishers, 1983.
- [2] Mallampati SR, Gatt SP, Gugino LD, Desai SP, Waraksa B, Freiberger D, et al. A clinical sign to predict difficult intubation: a prospective study. Can Anaesth Soc J. 1985; 32(4):429-34.

[3] Wilson ME, Spiegelhater D, Robertson JA, Lesser P. Predicting difficult intubation. Br J Anaesth. 1988; 61(2): 211-6

- [4] Khan ZH, kashfi A. A comparison of the upper lip bite test (a simple new technique) with modified Mallampti classification in predicting difficulty in endotracheal intubation: a prospective blinded study. Anesth Analg. 2003; 96: 595-9.
- [5] El Ganzouri AR, McCarthy RJ, Tuman KJ, Tanck EN, Ivankovich AD. Preoperative airway assessment Predictive value of a multivariate risk index. Anesth Analg 1996; 82(6):1197-204.
- [6] Khan ZH, Mohammai M, Rasouli MR, Farokhnia F, khan RH. The diagnostic value of the upper lip bite test combined with sternomental, distance, thyromental distance, and interincior distance for prediction of easy laryngoscopy and intubation: a prospective study. Anesth Analg. 2009; 109:822-4.