

# A SIMPLE CLASSIFICATION OF OROTRACHEAL INTUBATION

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## **ABSTRACT**

Difficult airway is an anaesthesiologists nightmare. One may succeed in intubation in a second attempt, or it may necessitate calling off the attempt and focusing on saving the life of the patient by ventilating him. A systematic approach to recruit more and more advanced aids may prevent major catastrophes. A classification of intubation based on increasing difficulty and increased use of intubating aids is presented.

## **INTRODUCTION**

Anaesthesiologists attain practical skills of various clinical procedures required to conduct safe administration of anaesthesia to their subjects. These include intravascular techniques e.g. intravenous cannulation, intra-arterial cannulation, central venous cannulation; airway techniques e.g. jaw holding, chin lift, mask ventilation or endotracheal intubation with IPPSV, and last but not the least the spinal as well as epidural injections through needles or catheters. Endotracheal intubation is one procedure of which the anaesthesiologist must be a master, more than any other practicing medical professional. He has to resort to this procedure not only in operation rooms to administrator general anaesthesia, but also to institute CPR and /or mechanical ventilation in intensive care settings. The degree of ease or difficulty of intubation varies from operator to operator, probably related to the length of experience, as well as the ability to cope up a difficult situation or crisis with cool nerves. It is also related to the expert help and other intubation aids available. It has been shown to vary in different population groups. Male gender is probably associated with comparatively higher ratio of intubation difficulty. Anaesthesiologists use a number of different approaches to accomplish successful intubation. In the following paragraphs a simple classification devised by the author is presented, based on the relative ease or difficulty.

## **EXISTING SCENARIO**

It is surprising that this commonly practiced

procedure with frequent tight encounters has escaped the eyes of critiques as far as classification is concerned. Most textbooks of anaesthesiology have only a flying description as easy, difficult, very difficult or impossible. This practice lacks the authentication so much needed for a scientific approach. A few attempts at scoring the difficulty were so difficult to memorize by themselves, that these could be judged as very difficult to receive wide-spread acclaim.

## **ASSESSMENT OF DIFFICULTY**

A number of systems have been devised to assess and predict the relative difficulty of intubation. Mallampatti scoring system based on visualization of pharyngeal structures and McCormick grading of laryngoscopic view of the larynx are well known. Other parameters include pharyngeal space, inter incisor distance, retromental distance etc. A high arched palate, protruding incisors or short receding jaw are notorious for increased difficulty.

## **THE ANAESTHESIOLOGISTS APPROACH**

A thorough pre-anaesthetic assessment will often indicate the possibility of a difficult airway as described above. An experienced anaesthesiologist will make necessary arrangements and check the availability of necessary intubating aids before embarking upon intubation in such a case. A systematic approach to gradually increasing difficulty will save major anaesthesia related accidents. The present classification is also a graded one from an unaided intubation to an impossible one, and taking into consideration the various methods employed by the anaesthesiologist one after one.

## **CLASSIFICATION OF OROTRACHEAL INTUBATION**

- |           |  |
|-----------|--|
| Class-I   | Un-aided intubation successful   |
| Class-II  | Laryngeal push needed  |
| Class-III | Stillette needed for successful intubation with or without laryngeal push. |



- Class-IV Change of size of ETT
- Change of blade's
  - Change of operator
  - Multiple attempts in addition to II & III above.
  - Blind Nasal intubation.

Class-V Failure of intubation. Attempt abandoned. Surgical airway.

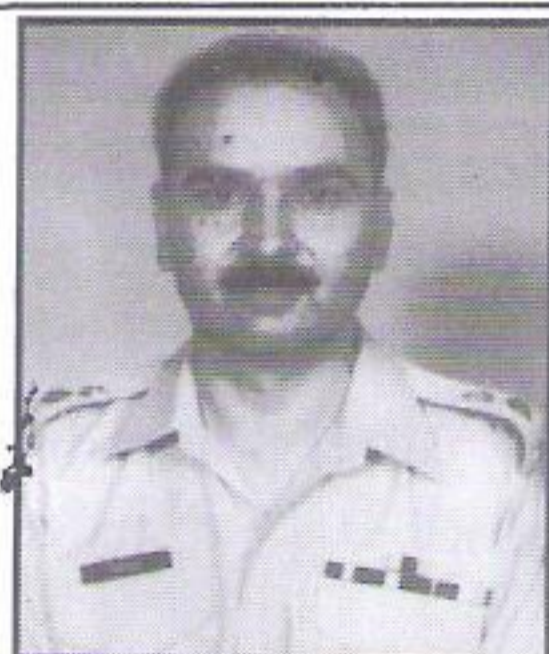
The uses and benefits of such a system may include the following.

- To provide guidelines for admissions.
- To assess patient's for day care surgery.
- To allow comparisons between different cohorts of patients.
- To allow comparison between different sets of

anesthetic techniques.

- To stratify the methods used during anaesthetic practice to reduce bias in research.
- To differentiate differences in morbidity and mortality according to technique.
- To make outcome predictions that influence clinical decisions.
- To reach a rational decision based on cost-effectiveness.
- To classify various anaesthesia outlets according to the facilities available.
- To compare the expertise of the anaesthesia administrators in a set-up, or between different set-ups.
- To facilitate description of anaesthesia technique.

Further work is required to validate this system. After due validation, it may be implemented internationally.



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## A L(ATIFA) C

*A medical specialist complained of heavy work load to a senior officer, explaining that his daily sick report consisted of more than 150 entitled patients, besides routine visit to a hundred and ten patients admitted in medical ward and another six or seven really very serious patients in ITC.*

*The senior officer asked, "And how many civilian patients do you attend daily?"*

*"About thirty to fifty, Sir!" the medical specialist answered*

*"That means you can attend more than three hundred patients daily. Let us check the condition in other hospitals as well, so we could pull a medical specialist out from where the work load per specialist is less than three hundred." was the reply of the senior officer.*