A Dissertation on

"A RANDOMISED COMPARATIVE STUDY OF KING VISION LARYNGOSCOPY, TRUVIEW LARYNGOSCOPY AND MACINTOSH LARYNGOSCOPY IN ROUTINE AIRWAY MANAGEMENT"

Submitted to the

THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY

In partial fulfillment of the requirements

For the award of degree of

M.D. (Branch-X)

ANAESTHESIOLOGY

GOVERNMENT STANLEY MEDICAL COLLEGE & HOSPITAL

THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,

CHENNAI, TAMILNADU

APRIL 2017

DECLARATION BY THE CANDIDATE

I, **Dr.K.DEEPTHI**, solemnly declare that the dissertation, titled "***A Randomised Comparative Study of King vision Laryngoscopy, Truview Laryngoscopy and Macintosh Laryngoscopy in routine airway management",*** is a bonafide work done by me during the period of JANUARY 2016 to SEPTEMBER 2016 at Government Stanley Medical College and Hospital, Chennai under the expert guidance of **Dr. S. PONNAMBALA NAMASIVAYAM,** M.D, D.A, Professor and Head, Department Of Anaesthesiology, Government Stanley Medical College, Chennai. This thesis is submitted to The Tamil Nadu Dr. M.G.R. Medical University in partial fulfillment of the rules and regulations for the M.D. degree examinations in Anaesthesiology to be held in April 2017.

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS:

ASA	AMERICAN SOCIETY OF ANESTHESIOLOGISTS
BMI	BODY MASS INDEX
CL	CORMACK LEHANE GRADE
ECG	ELECTROCARDIOGRAPHY
INJ	INJECTION
I.V	INTRAVENOUS
KVL	KING VISION LARYNGOSCOPE
ML	MACINTOSH LARYNGOSCOPE
NIBP	NON INVASIVE BLOOD PRESSURE
POGO	PERCENTAGE OF GLOTTIC OPENING
SD	STANDARD DEVIATION
TTI	TIME TAKEN FOR INTUBATION
TVL	TRUVIEW LARYNGOSCOPE

CHAPTER 1

INTRODUCTION

Airway management is the fundamental aspect of anesthetic practice and emergency and critical care medicine. Endotracheal intubation is a rapid, non-surgical and safe technique that achieves all the goals of airway management, maintains airway patency, protects the lungs from aspiration and permits leak free ventilation during mechanical ventilation, and hence remains the gold standard procedure for airway management.[1]

The main objective of airway management is not tracheal intubation. It is the maintenance of adequate oxygenation which is of paramount importance and can be achieved without intubation. Adequate ventilation, i.e. adequate oxygenation and elimination of carbon dioxide is the second objective. The third objective is to secure the airway from aspiration.

The major difficulty is an unanticipated difficult airway, as they are not recognized in the assessment preoperatively.[2]

The Mallampatti test is a frequently used predictive tool of a pre-operative risk for difficult intubation which has a reported sensitivity of 50% and specificity of 100%. [3]

The leading cause of anaesthetic morbidity and mortality are mainly the complications arising from difficult or failed intubation not withstanding recent developments in airway management strategies.[4]

If the anaesthetist can predict which patients are likely to anticipate a difficult airway, the risks of anaesthesia may be reduced considerably.

For many years direct laryngoscopy and tracheal intubation has been the mainstay of airway management.

Hence to reduce the incidence of this problem, many newer designs of Laryngoscopes are introduced .[5, 6, 7]

The uses of video-laryngoscopy has become widespread and have resulted in very significant changes to clinical practice. The novel techniques of intubation with video laryngoscopes have been developed with the aim of reducing the complications associated with intubation.

Video-laryngoscopes are recent development in intubation devices, with video cameras, enabling the operator to visualize the indirect view of glottis. Their

design is similar to conventional laryngoscopes, enabling anaesthesiologists trained with direct laryngoscopy to use them successfully, without the need for any special training.[8]

CHAPTER 2

AIMS AND OBJECTIVES

AIM

A Randomised Comparative Study of King vision Laryngoscopy, Truview EVO2 Laryngoscopy and Macintosh Laryngoscopy in routine airway management.

OBJECTIVES:

PRIMARY OBJECTIVE:

Assessment of

1. Ease of Intubation grade
2. Intubation Difficulty score
3. Cormack Lehane grade

SECONDARY OBJECTIVE:

Assessment of

1. Time Taken for intubation
2. Percentage of glottis opening score
3. Successful placement of Endotracheal tube

HISTORY OF LARYNGOSCOPE:

Dr. Benjamin Guy Babington was the first to view larynx and credited by historian as the inventor of laryngoscopes[9], though it was Dr. Philip Von Bozzini's "Lichtleiter" idea to use external light source to visualize internal viscera (Nasopharynx and Oropharynx)[10]. Later In 1854, Manuel Garcia a vocal pedagogist, was the first person to view the functioning of glottis and larynx in human and a detailed a report of his findings with demonstration of his technique was published in Proceedings of the Royal Society of London[11].

Dr. Ludwig and Professor Johann Czermak applied the technique into clinical practice[12].

Dr. Alfred Kirsten (1863-1922) a surgeon, shifted the paradigm from indirect laryngoscopy to direct laryngoscopy which he performed using modified esophagoscope that he called 'autoscope'[13].

Then Chevalier Jackson, an anaesthetist, improved on the work of Kirsten and made adjustments in the instrument and technique viz., distal illumination, sliding floor, supine direct laryngoscopy[14].

Dr. Henry Harrington Janeway, an American anaesthetist further improvised adding batteries on the handle, notch in the blade for tracheal tube to be in the middle and a minor curve to the blade's tip[15].

In 1921, Fran Magill invented Magill laryngoscope, with a straight blade.

In 1933, Mc Coy laryngoscope was invented with a lever tip for anterior displacement of the epiglottis .It is of significant importance in difficult airway situation.

Miller, in 1941 invented a straight blade laryngoscope, which is now being used in paediatric age group[16].

In 1943, Robert Reynolds Macintosh invented the laryngoscope with curved blade and was named after him, Macintosh laryngoscope [17].

ANATOMY OF THE LARYNX

The airway involves nasal cavity, oral cavity, pharynx, larynx, trachea and bronchial divisions.

The larynx anatomically extends from the fourth to sixth cervical vertebrae, and lies in the anterior aspect of neck. Laterally, it is related to the carotid sheath on each side and the lobe of thyroid. Anteriorly, it is related to the deep and superficial fascia of platysma.

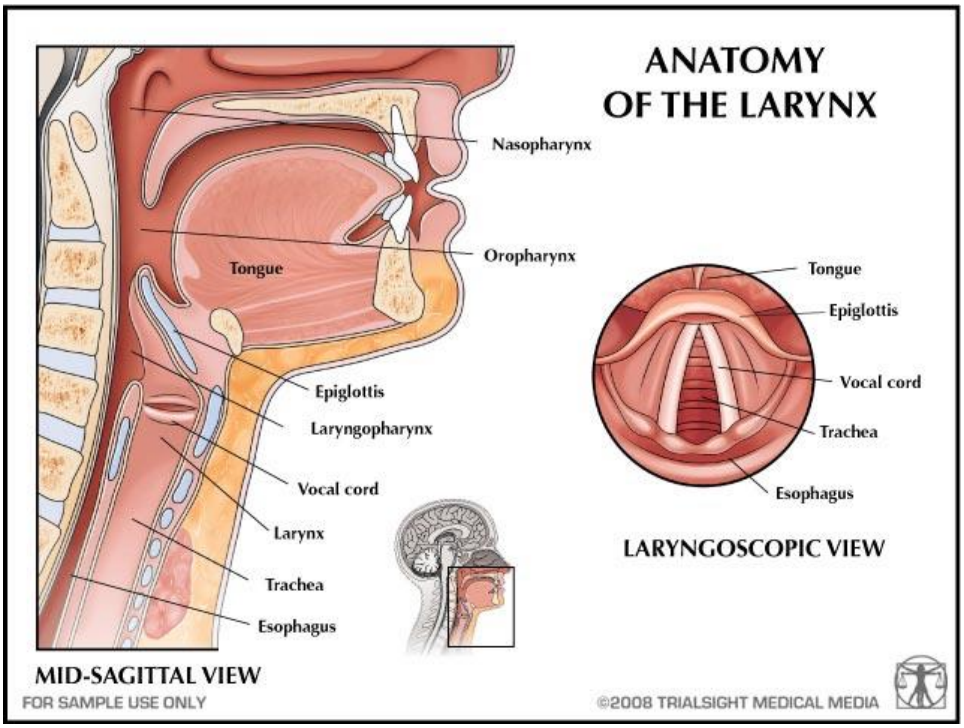


Figure 1. Anatomy of larynx

The laryngeal skeleton is made up of 9 cartilages, these are joined by various ligaments and membranes. It has three unpaired cartilages and three paired cartilages.

The hyoid bone is attached to the thyroid cartilage by the thyrohyoid membrane.

CARTILAGES:

Below this are the three unpaired midline cartilages:

Thyroid cartilage:

This is the largest among the cartilages of larynx. It has two lamina that form the laryngeal prominence. It has an angle of 90 degree in men and 120 in females. The superior border is attached by the thyrohyoid membrane to the hyoid bone. The cricoid cartilage articulates with the inferior cornua of the thyroid.

Cricoid cartilage:

It forms complete signet shaped ring around trachea. Laterally, it articulates with the inferior cornua of thyroid. It is attached by the cricothyroid ligament to the inferior border of thyroid and by the cricotracheal ligament to the first tracheal ring.

Epiglottis:

It is a leaf shaped elastic cartilage. It has its attachment to the thyroid cartilage by thyroepiglottic ligament and to hyoid bone anteriorly by the hyoepiglottic ligament. Superiorly, it is free and the depression between epiglottis and the posterior part of the tongue is called the vallecula.

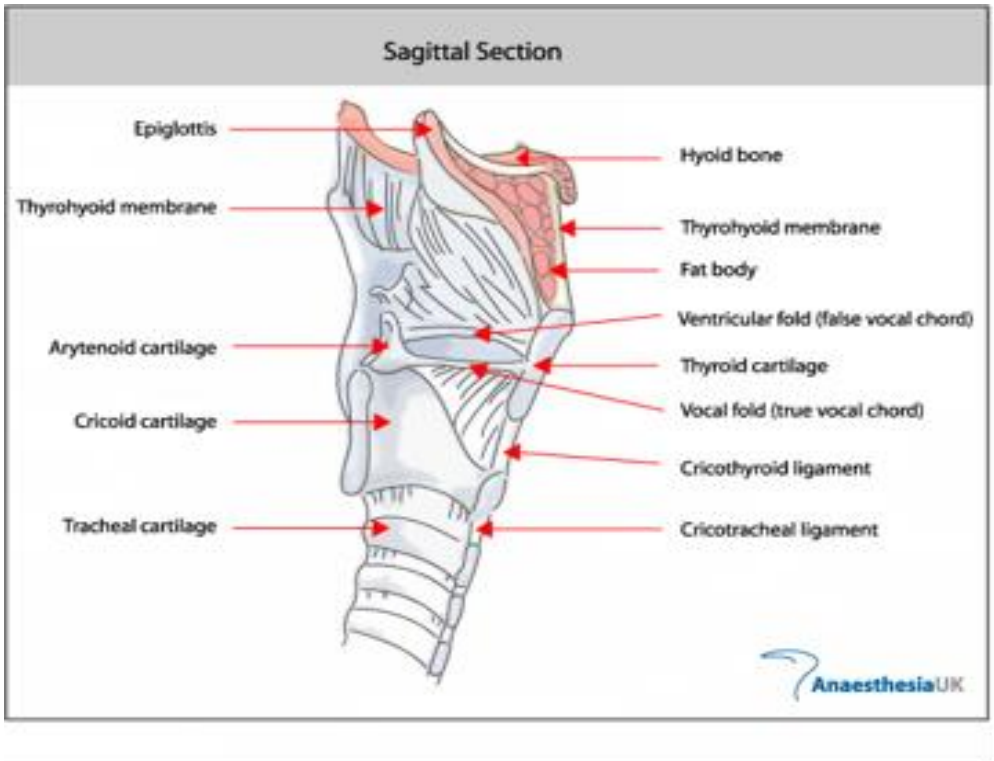


Figure 2. Lateral view of laryngeal cartilages

The paired cartilages are described below.

Arytenoids:

They are pyramidal in shape. The apex is attached to the corniculate cartilage. It has a lateral muscular process and a vocal process anteriorly to which is attached the cricoarytenoid muscles. They are attached on the posterior aspect of vocal cords, hence the only cartilage visible in the anterior airway.

Cuneiforms and Corniculates:

These small cartilages are located in the aryepiglottic folds. The corniculate cartilages have its attachment to arytenoids.

LIGAMENTS AND MEMBRANES:

Thyrohyoid membrane: It connects the thyroid cartilage with the hyoid bone.
Hypo-epiglottic ligament: It is the attachment between hyoid bone to the epiglottis.
Cricothyroid membrane: This is the site chosen for cricothyroidotomy located between thyroid and cricoid cartilage.

Cricotracheal ligament: The first ring of the trachea is connected to cricoid by this ligament.

Cricovocal membrane: The cricoid cartilage is attached to the laryngeal prominence in the thyroid cartilage and arytenoid (vocal process).

BLOOD SUPPLY OF THE LARYNX:

Blood supply is by the superior laryngeal artery, a branch of the superior thyroid artery.

It is also supplied by a branch from the inferior thyroid artery, the inferior laryngeal artery.

NERVE SUPPLY OF LARYNX:

The larynx is supplied by branches of the cranial nerve vagus.

Superior laryngeal nerve.

It divides into:

Internal branch: It provides Sensory supply to the glottis and supraglottis, and epiglottis.

External branch: It supplies the cricothyroid muscle (motor supply)

Recurrent laryngeal nerve: The subglottis receives its sensory supply and motor supply to all intrinsic muscles of the larynx, except cricothyroid.

Glossopharyngeal (IX) cranial nerve: Sensory supply to the base of tongue and Vallecula [18, 19].

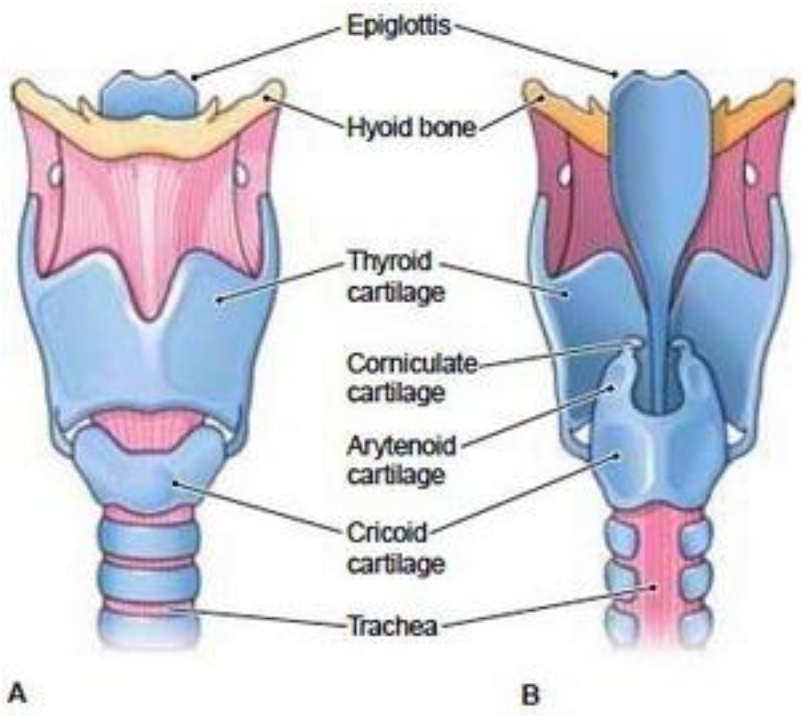


Figure 3.Anatomy of laryngeal cartilages

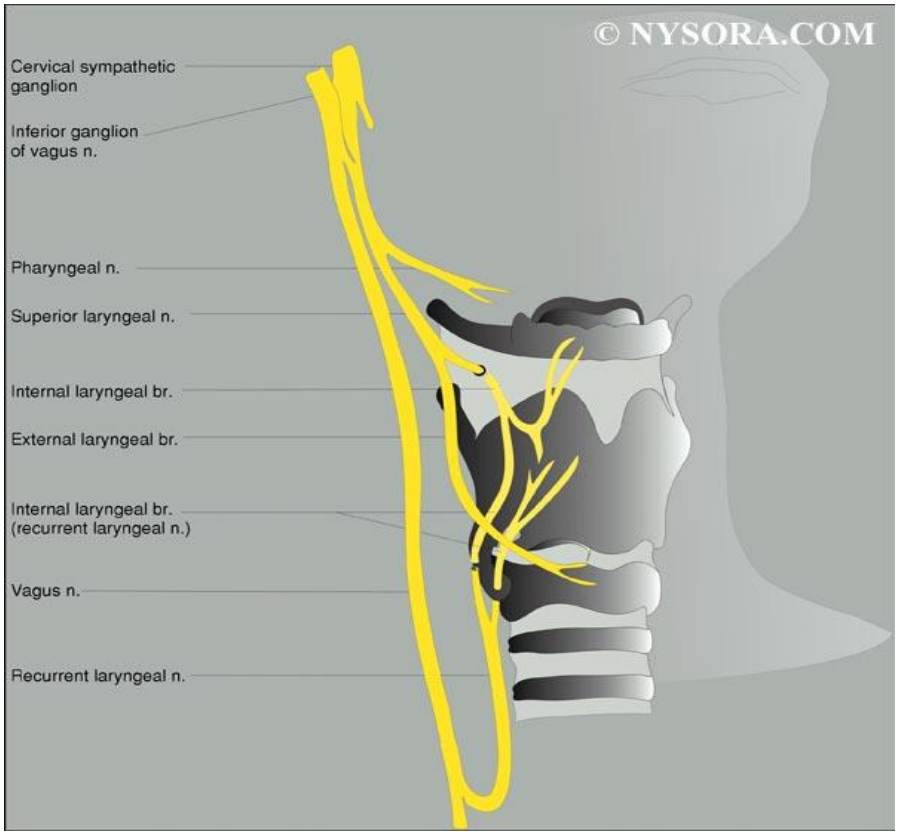


Figure 4. Nerve supply of larynx

AIRWAY AXES

- It is essential to align the oral axis, pharyngeal axis and laryngeal axis, to maximize the potential exposure of the glottic opening thereby allowing a direct view from the teeth to the glottis.

- This is achieved by positioning the patient in so called as “sniffing” position.

- Elevating the occiput approximately 10 cm higher, than the shoulder provide flexion at cervical joint to align the laryngeal and pharyngeal axes.

- The alignment the oral axis with the laryngeal and pharyngeal axes is achieved by extension of atlanto-occipital joint. This extension is done by the free hand of the anesthetist.

- Sniffing position is considered the optimal “classical” position of the head and neck for facilitating intubation proposed by MAGILL IN 1936.

- This sniffing position is essential for both direct laryngoscopy and fiberoptic stylet intubation
- Improper alignment can lead to difficult and failed intubation.

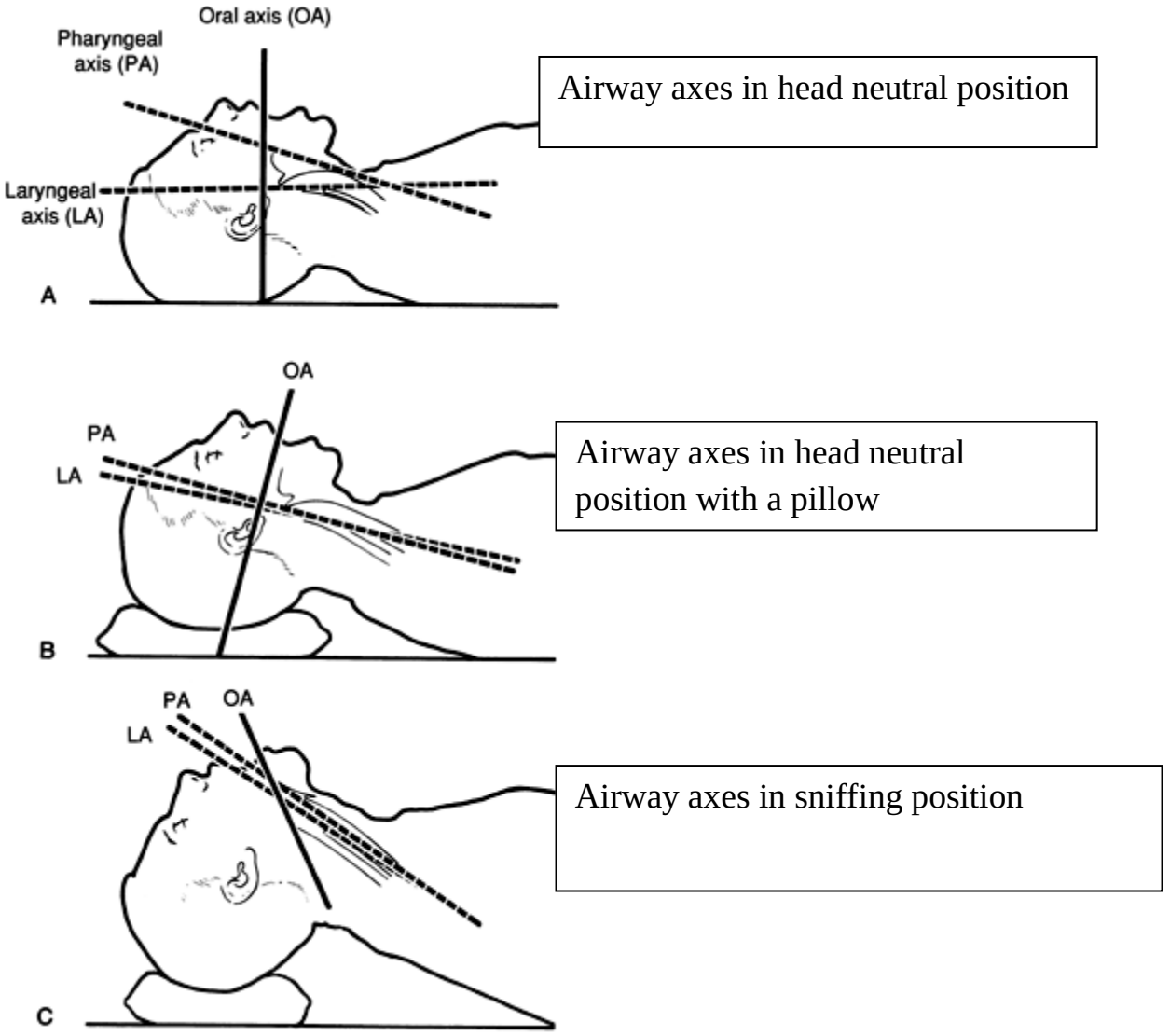


Figure 5. Airway axes

CONVENTIONAL MACINTOSH LARYNGOSCOPE:[20]

Laryngoscopes are used to view the larynx and oral cavity, for the purpose of inserting a tube into the tracheobronchial tree. Other purposes including placing a gastric tube or Trans esophageal echo cardiac probe, foreign body removal and visualizing and assessing the upper airway.

Parts of laryngoscopes are

1. Blade

2. Handle

Blade:

The blade is the component that is introduced into the oral cavity. The blades are numbered, the size of the blade increases with number. The blade is composed of "Base, heel, tongue, flange, web, tip and light source".

Figure 6.Macintosh Laryngoscope

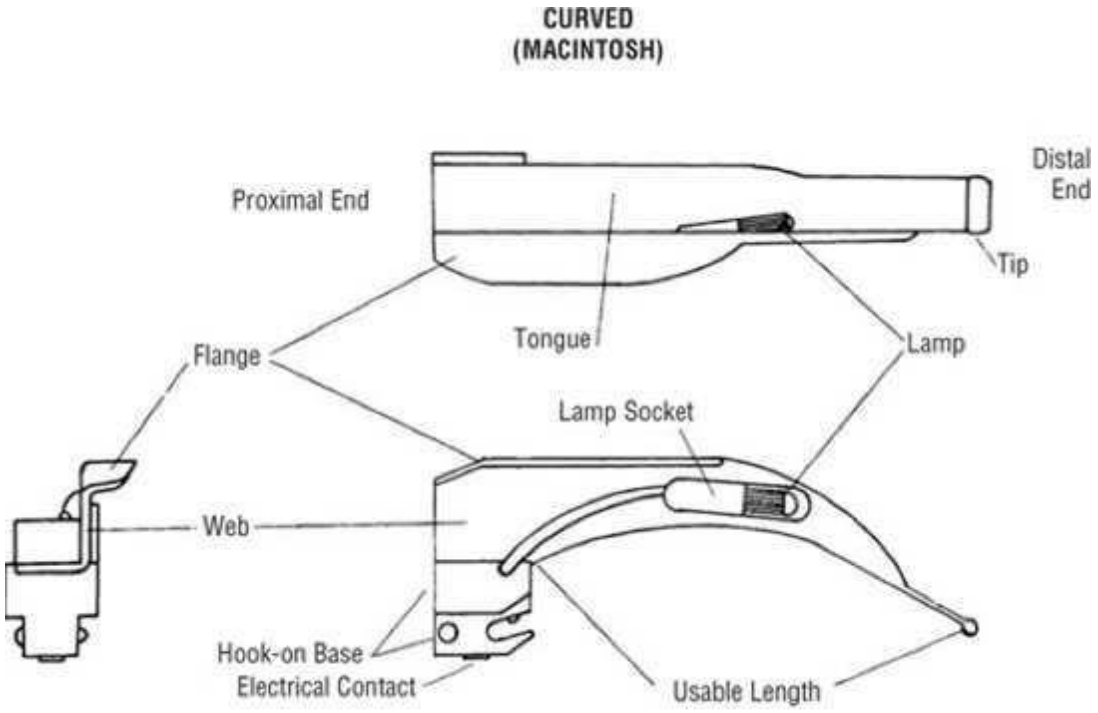


Figure7. Parts of Macintosh laryngoscope

Table 1.Different size of Macintosh blades

Markings	**Intended use**
0	Neonate
1	Small child
2	Child
3	Adult
4	Large adult

BASE is the part that attaches to the handle. It has a slot for engaging the hinge pin of the handle. The end of the base is called the **Heel.**

Tongue (Spatula) is the main shaft. It serves to compress and manipulate the soft tissues (especially the tongue) and lower jaw. The long axis of the tongue may be straight or curved in part or all of its length. Blades are commonly referred to as curved or straight, depending on the predominant shape of the tongue.

Hook-on (hinged, folding) connection between the blade and handle is most commonly used. The handle fits into a slot on the base of the blade and is fitted with a hinge pin. This allows the blade to be quickly and easily attached or detached.

The light source is a bulb attached to the blade. For a detachable handle and blade, the light source is energized when the blade and handle are locked in the operating position.

The Flange projects off the side of the tongue and connected to it by the web. It serves to guide instrumentation and deflect tissues from the line of vision.

The Tip (beak) contacts either the epiglottis or the vallecula and directly or indirectly elevates the epiglottis. It is usually blunt and thickened to decrease trauma.

Lamp (bulb) that transmits light from a source in the handle. The lamp screws into a socket that has a metallic contact. On most blades, the socket is located near the tip. When the blade is in the working position, electrical contact with the power source in the handle is made. The socket is subject to soiling by fluids that can affect the electrical contacts, causing the light to fail.

Handle: The handle is the part held in the hand during use. It provided the power for the light .Most often, disposable batteries are the power source. Handles with rechargeable batteries are available. Handle designed to accept blades that have a light bulb have a metallic contact, which completes an electric circuit when the handle and blade are in the working position. Handles containing batteries and

using fiberoptic illumination contains a halogen lamp bulb. When the handle and blade are locked in the working position, an activator switch is depressed. This provides a connection between the bulb and batteries. A halogen lamp bulb haslonger life than other light bulbs.

KING VISION LARYNGOSCOPE:

King vision consists of a reusable stem and has a color screen and battery housing. It has a Video Aspect Ratio 4:3, a Video Refresh Rate of 30 frames per second and a Video Screen Size of 6.096 cm / 2.4” diagonal .The King vision has a viewable angle of 160 degrees. It has L- shaped blades.

The L shape of the blade conforms to the upper airway, thus eliminating the need to align axes, and providing an “around the corner ” view of larynx. Towards the distal tip of the blade is present the illumination source and video camera. The blades are available both with and without guiding channel.

Figure8. King vision video laryngoscope

The guiding channel poses an advantage of endotracheal tube passage in difficult airways in less experienced hands. Following intubation, the endotracheal tube is detached laterally from the channel and the laryngoscope is removed[21]. It has a Battery Life of about 90 minutes (confirmed with Power Indicator status). An antifog coating is present at the distal tip.

Figure 9: Channeled and Non channeled blade of King vision laryngoscope

TRUVIEW EVO2 LARYNGOSCOPE:

The Truview EVO2 laryngoscope is a recently introduced device with a unique blade that provides an optical view around the corner. It has a modified blade with an unmagnified optical side port with anterior fraction of 35 % in line of sight enabling indirect tracheal intubation [22].

The Truview has been designed with the advantage to improve the view of the larynx in patients with a poor view with conventional laryngoscope. The optical principle of light refraction is applied to provide a more anterior view of the larynx.[23]

The oxygen insufflation port is useful to prevent fogging and also helpful in patients who have poor pulmonary function.

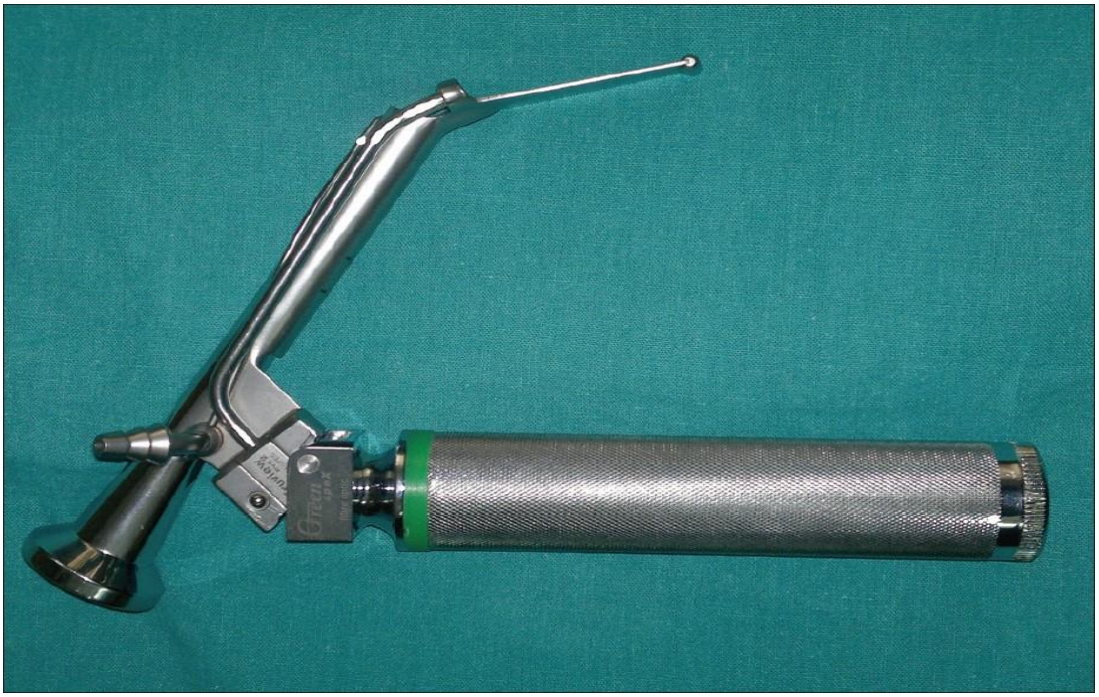


Figure 10. Truview EVO2 laryngoscope

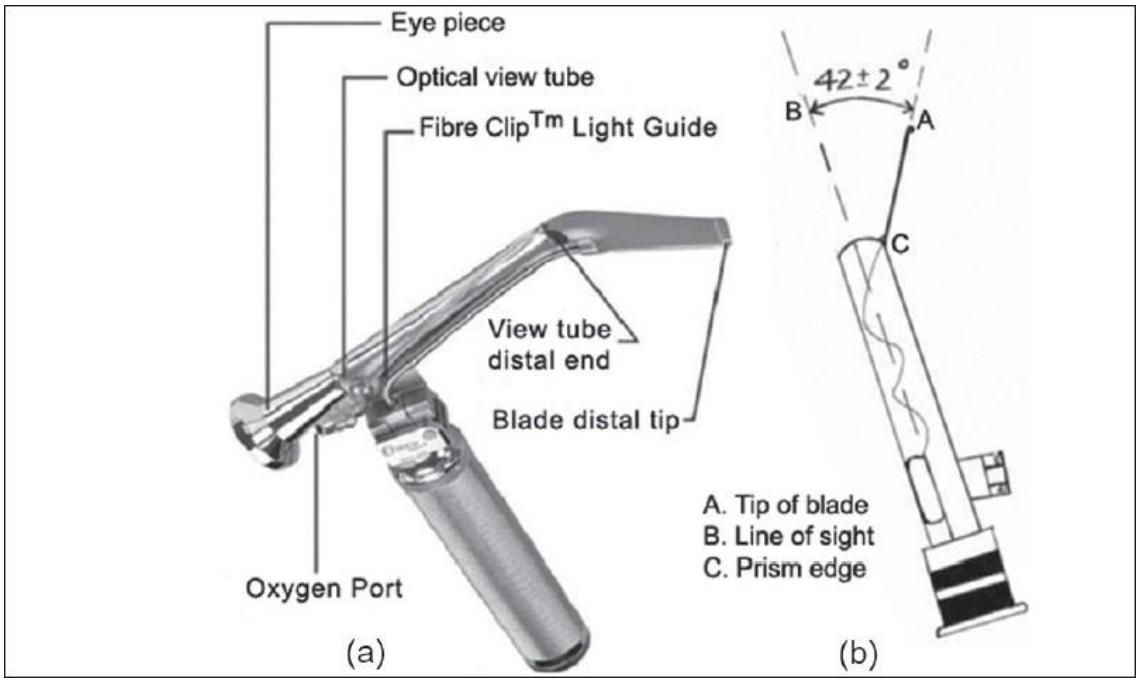


Figure11. Parts of Truview laryngoscope

CHAPTER 3

REVIEW OF LITERATURE

Tutuncu et al [24] compared the quality of laryngoscopic exposures that is obtained with the Truview EVO2 laryngoscope and the Macintosh laryngoscope.

After obtaining informed consent from the patients and ethical committee approval 185 adult patients of ASA I and ASA II were enrolled in this study. They were randomized into two groups. The first procedure was done with Macintosh laryngoscope followed by intubation with Truview EVO2. Reventilation was performed between the two procedures. Cormack Lehane grades for two devices were compared and were significantly better with Truview EVO2 laryngoscope.

The requirement of a guide or stylet in all intubation with Truview EVO2 was a major drawback according to the study. Truview Laryngoscope did not decrease the incidence of failed intubation in the study population.

Suman Arora et al [25] compared the two laryngoscopes Trueview EVO2 with Macintosh in routine airway management. This study included 110 adult patients of either sex between 18 and 60 years, who were scheduled for elective surgery requiring general anaesthesia. The laryngoscopic view, Intubation difficulty score,

Duration of intubation and percentage of glottis opening with each laryngoscopes were compared. Demographic data were analysed using‘t ‘test.

The data for laryngoscopic view were analysed with Chi square test. POGO score and duration of intubation were analyzed with t test. Intubation difficulty score was low and comparable in both the groups. The duration of intubation was also comparable in True view and Macintosh laryngoscopy. Cormack Lehane grading was 2a or less in 98 % with Truview compared to 78 % with Macintosh Laryngoscopy. Truview EVO2 laryngoscope performed comparably to Macintosh Laryngoscope in normal airway. In cases of difficult airway in which glottis view is not visualized with Macintosh laryngoscope, Truview laryngoscope may be a better option for endotracheal intubation.

Murphy et al [26] in their study compared King vision video laryngoscope and Macintosh laryngoscopes in normal and simulated difficult airway conditions. Primary outcome measured in this study were time taken for intubation, and rate of

successful intubation. Secondary outcomes measured were Cormack Lehane grading and Percentage of glottic opening. In the study, 32 paramedics were enrolled and the following observations were noted. The time taken for intubation was faster with King vision laryngoscope group. Also, the Cormack Lehane grading was lower with King vision laryngoscope group than Macintosh

laryngoscope. Higher percentage of glottis opening was noted in King vision laryngoscope group. Among the 32 participants, 10 were failed intubation with Macintosh laryngoscope and all were successful intubation with King vision laryngoscope.

Saxena et al [27] in the study compared the Truview Laryngoscope with the Macintosh laryngoscope (ML) for routine endotracheal intubations in patients with usual airway characteristics. The study enrolled 140 elective surgical patients requiring intubation were selected in a randomised manner. Cormack and Lehane grades, time required for intubation, ease of intubation, Intubation difficulty score, intubation attempts, success rate of intubation were the parameters compared using the two blades. A better laryngoscopic view as suggested by improved Cormack and Lehane grades (in 48 patients) was observed with Truview EVO2 blade, but time for intubation than the Macintosh blade (34.1 vs. 22.4 s).

They have noted an improved laryngoscopic view at the cost of longer mean intubation time. They have concluded that a better laryngoscopic view is obtained with Truview than Macintosh in difficult cases. In the study they have emphasized the need for more training with intubation using Truview laryngoscope.

Akihisa Y et al [28]In this study, observed the efficacy of King vision laryngoscope was evaluated in novice personnel. Thirty one registered nurses were enrolled in their study. In a randomized fashion, they intubated with Macintosh laryngoscope, King vision laryngoscope with channeled blade and with non channeled blade.

From the study it was noted that the mean time for intubation was less with Macintosh blade followed by intubation with King vision channeled blade. The King vision non channeled blade when compared with the Macintosh blade or the King vision channeled blade required significantly longer time for intubation. Success rate with the King vision non channeled blade was significantly inferior to that with the Macintosh blade or King vision channeled blade. Median intubation difficulty score was lower with both Macintosh blade and King vision channeled blade when compared with King vision non channeled blade. It was observed that no esophageal intubation occurred with King vision channeled blade. However, intubation times, success rates were similar to the values obtained with the Macintosh blade. The study thus concluded that King vision Video laryngoscope with channeled blade could be used as an alternative to Macintosh laryngoscope for intubation by untrained persons.

Singh et al [28] through this study, they aimed to determine the applicability of Truview EVO2 laryngoscope in operating rooms as routine equipment as an alternative to Macintosh laryngoscope. They reported that the Truview laryngoscope improved Cormack Lehane grading by one or more grades compared to Macintosh laryngoscope. The time taken for intubation was comparable in both the groups. When ease of intubation was taken into consideration, Macintosh proved to be better than Truview laryngoscope. The intubation using Truview laryngoscope requires the tube to be inserted blindly until it is seen in the optic visual field . Also the indirect manner of intubation requires proper hand and eye coordination.

Li et al [23] compared the Truview laryngoscope with the traditional Macintosh laryngoscope. In this study, 200 patients who required tracheal intubation for elective surgery were enrolled and randomized into two groups. The view of the larynx was better with the TruView EVO2 laryngoscope than with the Macintosh laryngoscope in patients with a Cormack and Lehane grade greater than 1. The mean time to intubate was significantly shorter with the Macintosh laryngoscope (34 s) than with the TruView laryngoscope (51 s). Two patients in Macintosh group and one patient in Truview group had minor trauma to lip. All the caseswere successfully intubated. From the study, it is concluded that Truview is

advantageous in difficult airway situation when Macintosh blade fails to show the glottic view.

Matsumoto et al [29] reported the use of the TruView video laryngoscope in two patients with difficult airways. Although the TruView EVO2 laryngoscope may provide a better view of the larynx than the Macintosh blade, the addition of the optic port increases the overall size and weight of the blade. In patients who have only limited ability to open their mouth, insertion of the blade may be difficult.

The TruView EVO2 system is designed to provide indirect laryngoscopy with continuous oxygen insufflation, which may be helpful for some patients who have poor pulmonary function.

Barak M et al [30]prospectively compared the Truview and Macintosh blades in terms of laryngeal view and intubating conditions. They included 170 patients undergoing general anaesthesia that required endotracheal intubation in the study. The following parameters were noted, it includes pre-operative airway evaluation, laryngoscopic view, duration of intubation, maximal force applied during intubation, bleeding, teeth and soft tissue damage, and postoperative stridor and hoarseness. The results demonstrated that, Truview produced a better

laryngoscopic view and less maximal force applied during intubation. The duration of intubation was longer with Truview laryngoscope. No significant difference was found in the estimation of intubation effort, tooth damage or postoperative stridor and hoarseness. Soft tissue damage and bleeding following intubation with the Truview was significantly less than with the Macintosh blade.

The study concluded that Truview blade is a useful option for tracheal intubation in patients with normal and anticipated difficult airways.

Namazi IJ et al [31] have compared the POGO score, Cormack Lehane grading, Time taken for intubation, Ease of intubation with Truview and King vision laryngoscope. From the observations of the study in 60 patients, it is noted that the Ease of intubation in Truview group was grade 1 in 73% and in King vision group 66 %. The Time taken for intubation was statistically significant and was less with Truview laryngoscope. The POGO scores and Cormack Lehane grading was comparable in both the groups. They have concluded both the laryngoscopes provided good laryngeal view and the success rate for intubation was high.

CHAPTER 4

MATERIALS AND METHODOLOGY

Three hundred patients of ASA physical status one and two undergoing elective surgeries under general anaesthesia with endotracheal intubation were included in the study. It is a randomised prospective control study. Patients in the age group of 18 -60 years were included in the study. The study was conducted in Stanley medical college.

The study was approved by our institutional ethical committee. After obtaining informed consent from the patients the study was conducted. This study was done for a period of six months.

INCLUSION CRITERIA:

- Age: 18 – 60 yrs.
- ASA I and ASA II
- Surgery: Elective general surgery
- Mallampatti score : one and two

EXCLUSION CRITERIA

- Increased intracranial pressure
- Cervical spine injury
- Obesity (BMI >30 kgm^{-2})
- Patients with past history of musculoskeletal disorders
- Emergency surgery, those at increased risk of aspiration

MATERIALS REQUIRED

- Laryngoscope blades of various sizes, Bougie, Oropharyngeal airway
- King vision laryngoscope
- Truview EVO2 laryngoscope
- Drugs –Inj. Glycopyrrolate

  Inj. Midazolam

  Inj. Fentanyl

  Inj. Thiopentone

  Inj. Vecuronium

  Inj. Succinylcholine

  Inj. Neostigmine

- Monitors- ECG/ NIBP/ Pulse oximetry/ Capnography
- 2 ml,5ml and 10 ml syringes
- 18 G iv cannula
- I.v fluids

STUDY DESIGN: Randomised prospective comparative study

SAMPLE SIZE AND RANDOMISATION

The sample size was estimated as 300 based on previous studies and pilot study

STATISTICAL ANALYSIS:

Sample size:

It is assumed the mean difference between the group 10seconds and the SD=12 are before the experiment and the effect of the instrument after the application on subjects. Assuming the significance level of 5% with power of 80% the required sample size for the study is 23 .i.e. for each group 23 subjects is needed .

The formula for the sample size calculation is as follows.

$$n = \frac{(z_\alpha + z_\beta)^2 (s_1^2 + s_2^2)}{(m_2 - m_1)^2}$$

Where n = sample size required for each group=23

Zα = level of significance at 5%. =1.96

Zβ = power for detecting significance difference between the group 80% =0.842

m1 mean value for the group1

m2 mean value for the group2

m2-m1 = 10

S1 = standard deviation of group1 =12

S2 = standard deviation of group2= 12

Based on the formula (sample size of 23 required in each group for significance) and previous literature ,three hundred patients have been enrolled in this study.

They were randomly allocated to 100 in each group and were named as:

Group ML (intubation using Macintosh laryngoscope)

Group KVL (intubation using King vision video laryngoscope)

Group TVL (intubation using Truview EVO2 laryngoscope).

Randomisation is done by computerized generated randomized table.

CONDUCT OF ANAESTHESIA:

GROUPS:

GROUP ML: Intubation with Macintosh laryngoscope

GROUP KVL: Intubation with King vision video laryngoscope

GROUP TVL: Intubation with True view laryngoscope

MONITORING:

A. NON INVASIVE BLOOD PRESSURE
B. HEART RATE
C. PULSE OXIMETRY
D. ELECTROCARDIOGRAPHY
E. CAPNOGRAPH

METHODOLOGY:

The consented patients of ASA I and ASA II of age 18-60 yrs of both genders scheduled for elective surgery were selected.

Primary Objective:

To compare

Ease of intubation grading

- Grade 1: Intubation easy
- Grade 2: Intubation requiring an increased anterior lifting force and assistance to pull the right corner of the mouth upwards to increase space
- Grade 3: Intubation requiring multiple attempts and a curved stylet
- Grade 4: Failure to intubate with the assigned Laryngoscope[31]

Intubation difficulty score

The intubation difficulty scoring is the sum of the following seven variables

N1: Number of intubation attempts >1

N2: Number of operators > 1

N3: Number of alternative techniques used

N4: Glottic exposure (CL grade minus 1)

N5: Lifting force required during laryngoscopy (0 = normal; 1 = increased)

N6: Necessity for laryngeal pressure

Total IDS = sum of scores

IDS	**Degree of difficulty**
0	Easy
0<IDS<5	Slight difficulty
IDS >5	Moderate to major difficulty
IDS= infinity	Impossible[25]

Cormack Lehane grading

Grade 1: Full view of glottis

Grade 2: Partial view of glottis

Grade 3: Only epiglottis seen

Grade 4: No glottic structures seen

Secondary objective:

To study the

I: TIME TAKEN FOR INTUBATION

GROUP ML:

From insertion of Macintosh blade into the oral cavity and till the confirmation of endotracheal intubation by auscultation and conventional capnography.

GROUP KVL:

From the insertion of the King vision laryngoscope into oral cavity till the confirmation of endotracheal intubation by auscultation and conventional capnography.

GROUP TVL:

From the insertion of the Truview EVO2 laryngoscope into oral cavity till the confirmation of endotracheal intubation by auscultation and conventional capnography.

POGO score:

Defined by a linear span from the anterior commisure to interarytenoid notch

0 %: Interaytenoid cartilage not seen

100%: Full view of glottis

Successful placement of Endotracheal tube:

The Successful placement of endotracheal tube with the assigned laryngoscope is Measured.

PRE ANAESTHETIC PREPARATION:

Patients were admitted in the ward as inpatients and routine investigations such as complete blood count, blood urea , serum creatinine ,random blood sugar ,chest xray and ECG were done.

PREMEDICATION:

All patients are premedicated with antisialogogue Inj. Glycopyrrolate 10µg/kg intramuscularly half an hour before the procedure .On arrival into the operating room patient's baseline parameters such as heart rate, systolic blood pressure,

diastolic blood pressure and mean arterial blood pressure and Spo2 are recorded. Patient monitored with pulse oximetry, NIBP and ECG.

I.V Line secured with 18 G venflon cannula.

Inj. Midazolam 0.02µg/kg and Inj. Fentanyl 2µg/kg was given to both the groups.

Patient preoxygenated with 100 % oxygen for 3 minutes.

INDUCTION:

Patient induced with Inj. Thiopentone sodium 5mg/kg in all the groups , Group ML, Group KVL and Group TVL.

MUSCLE RELAXANT:

Inj. Vecuronium 0.1 mg/kg is the muscle relaxant used in all the groups. Patient ventilated for 60 seconds.

INTUBATION :

GROUP ML: Patient was positioned in sniffing position and with Macintosh laryngoscope patient was intubated.

GROUP KVL:

Patient was positioned with head in neutral position and intubated with King vision Laryngoscope, using channeled blade with the endotracheal tube preloaded and entering through midline and requires depression of the tongue, not deviation as with Macintosh laryngoscope.

GROUP TVL:

Patient was positioned with head in neutral position and intubated using Truview EVo2 laryngoscope, using intubating stylet.

A maximum of two attempts or 60 seconds were allowed with the assigned laryngoscope, if failed to intubate the patient was ventilated and intubated with conventional laryngoscope.

All intubations were performed by anaesthesiologists having atleast two years of experience in anaesthesiology with minimum 100 successful intubations and 25 successful intubations with each King vision and Truview laryngoscope.

CHAPTER 5

OBSERVATION AND RESULTS

After collecting the data, all the variables are examined for outliers and non-normal distributions. The Categorical variables are expressed as Frequency and Percentage. The Quantity variables are expressed as mean and standard deviation.

Descriptive statistics are used to evaluate baseline characteristics. Student's *t*-test and ANOVA were used to analyze the parametric data, and discrete (categorical) variables were analyzed using the Chi square test, with a $P< 0.05$ considered statistically significant. The statistical analysis was carried out using statistical software package SPSS 16.0.

Figure 12.BAR DIAGRAM SHOWING AGE DISTRIBUTION

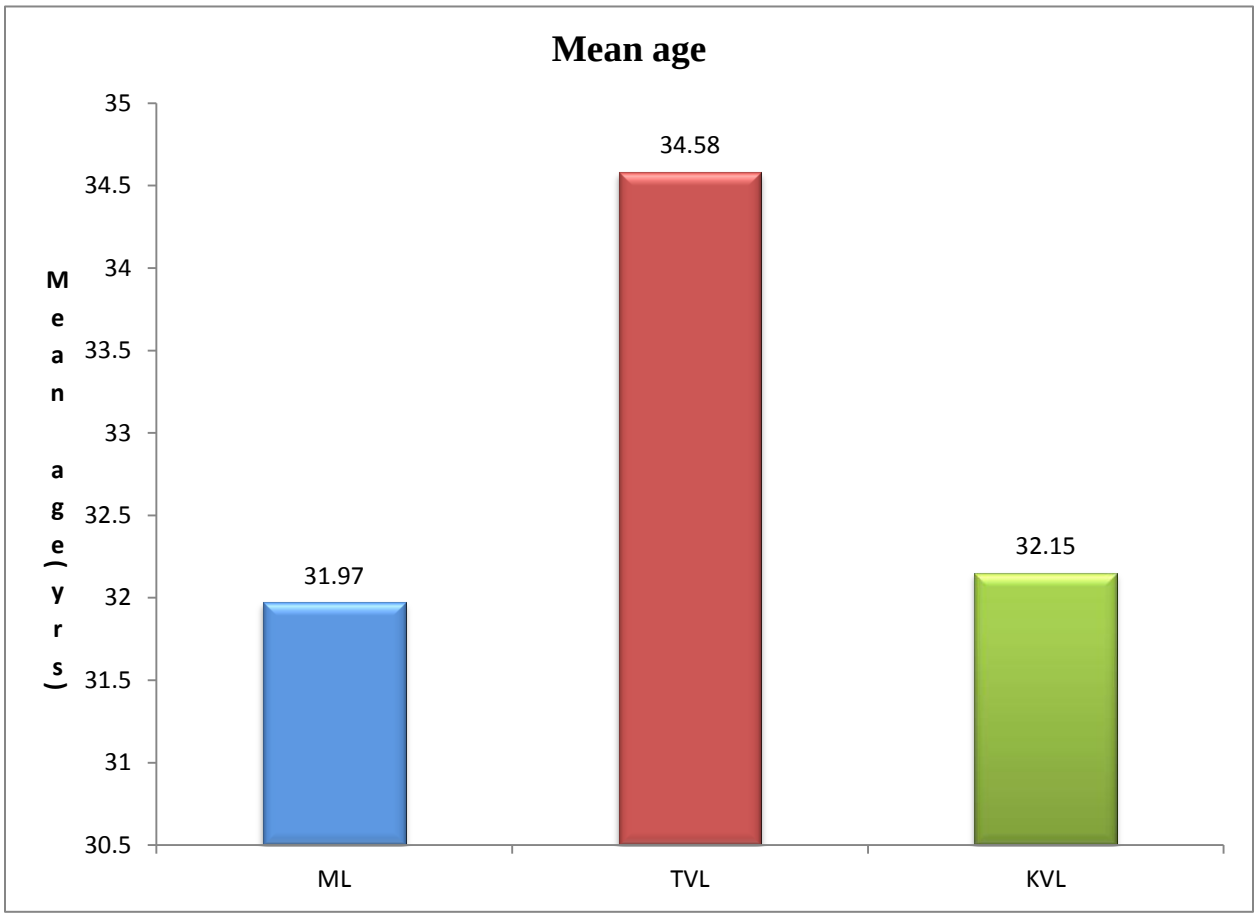


Figure13. BAR DIAGRAM SHOWING WEIGHT DISTRIBUTION

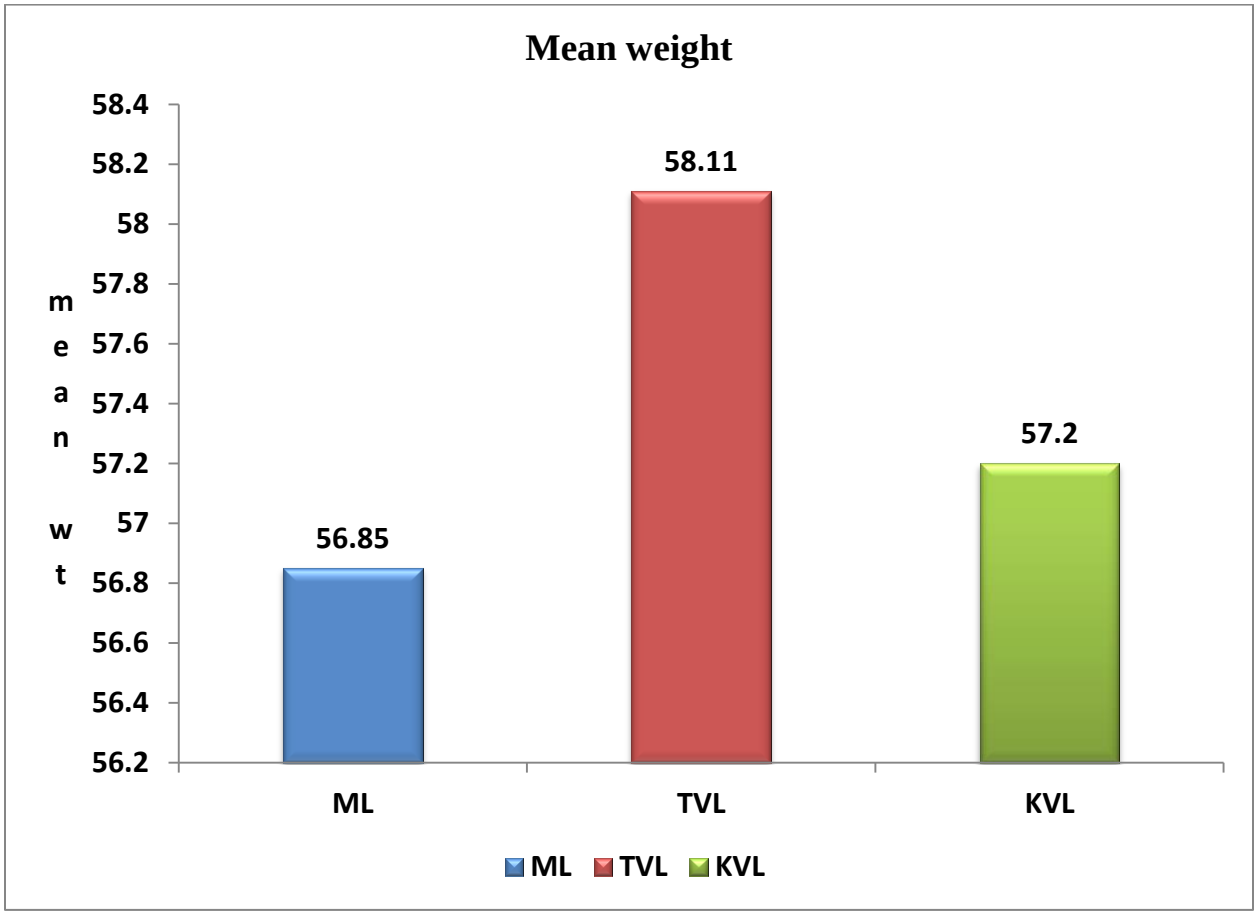


Figure14. BAR DIAGRAM SHOWING HEIGHT DISTRIBUTION BETWEEN THE GROUPS ML, GROUP TVL AND GROUP KVL

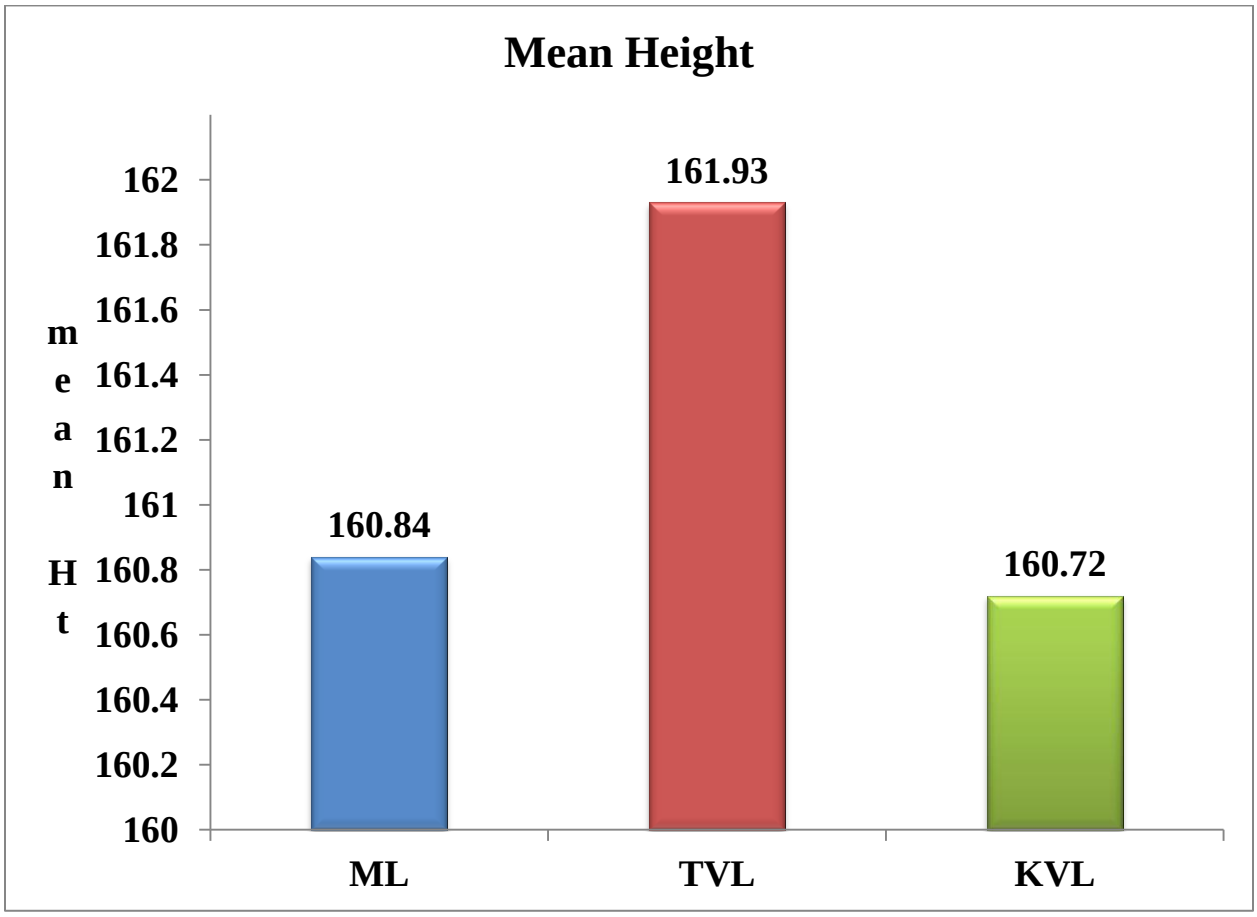
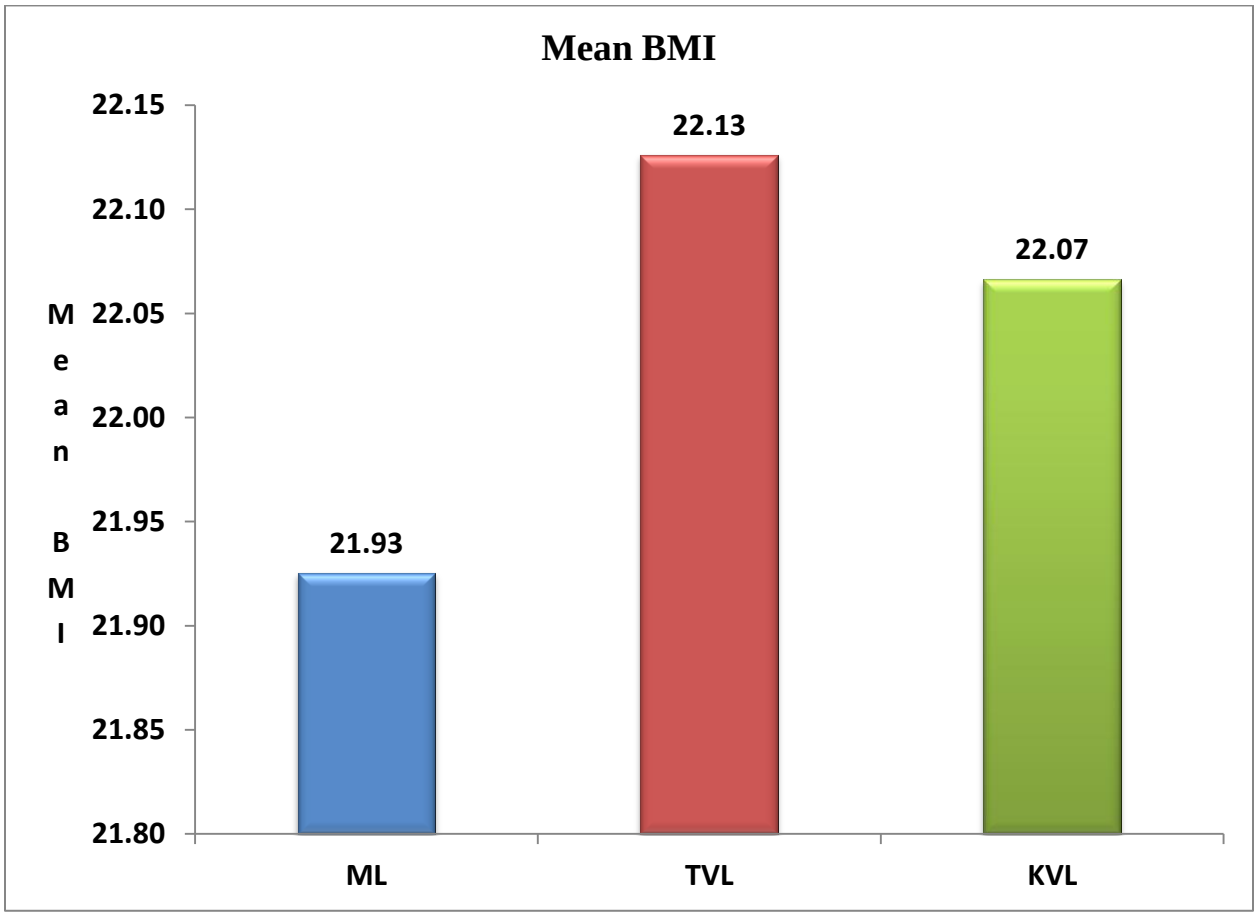


Figure15. BAR DIAGRAM SHOWING BMI DISTRIBUTION BETWEEN THE GROUPS ML, GROUP TVL AND GROUP KVL



The mean age of patients in Group ML, Group TVL and Group KVL are 31.97 years, 34.58 years and 32.15 years respectively.

The mean weight of patients in Group ML, Group TVL and Group KVL are 56.85 kg, 58.11 kg and 57.20 kg respectively.

The mean height of patients in Group ML, Group TVL and Group KVL are 160.84 cm, 161.93 cm and 160.72 cm respectively.

The mean weight of patients in Group ML, Group TVL and Group KVL are 56.85 kg, 58.11 kg and 57.20 kg respectively.

On analyzing the data statistically p value is found to be 0.20, 0.33,0.20 and 0.60 All these values were >0.05, hence the difference was statistically insignificant between the two groups in terms of age, weight, height and BMI and the groups were therefore comparable.

Table 2. COMPARISON OF GENDER DISTRIBUTION:

			SEX		
			Male	Female	Total
GROUP	ML	Count	48	52	100
		% within GROUP	48.0%	52.0%	100.0%
	TVL	Count	48	52	100
		% within GROUP	48.0%	52.0%	100.0%
	KVL	Count	39	61	100
		% within GROUP	39.0%	61.0%	100.0%
Total		Count	135	165	300
		% within GROUP	45.0%	55.0%	100.0%

The proportion of males in group ML is 48 % and of females is 52%

The proportion of males in group TVL is 48% and of females is 52%

The proportion of males in group KVL is 39% and of females is 61%.

On analysing this data statistically the p value was calculated as p= 0.330

As the p value is 0.2, hence the data is statistically insignificant in terms of gender between the groups. The three groups are therefore comparable.

Figure16. BAR CHART COMPARING THE GENDER DISTRIBUTION BETWEEN THE GROUPS

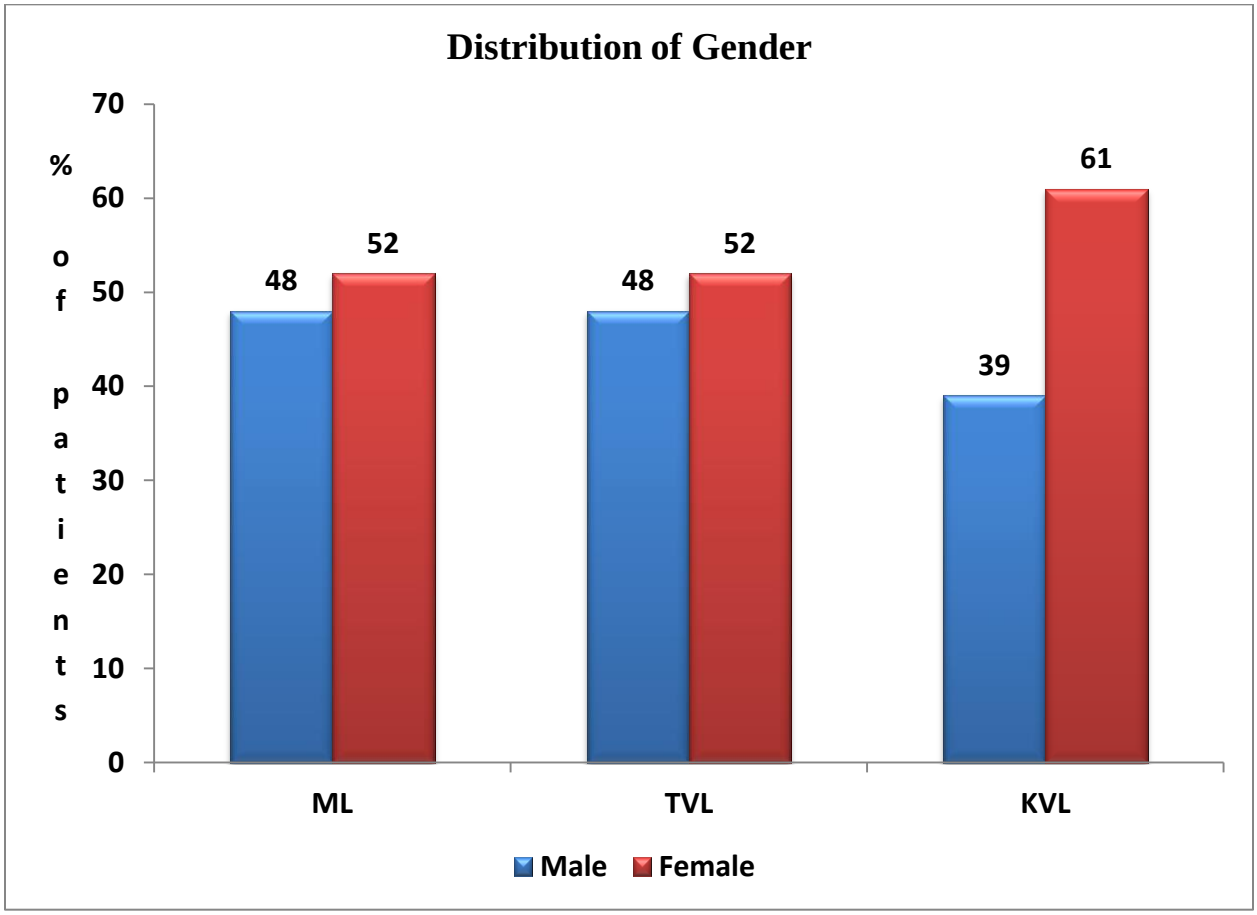


Table 3 . COMPARISION OF THE MALLAMPATTI CLASSIFICATION

			MALLAMPATI CLASSIFICATION				
			1	**2**	**3**	**4**	Total
GROUP	ML	Count	56	44	0	0	100
		% within GROUP	56.0%	44.0%	0	0	100.0%
	TVL	Count	52	48	0	0	100
		% within GROUP	52.0%	48.0%	0	0	100.0%
	KVL	Count	44	56	0	0	100
		% within GROUP	44.0%	56.0%	0	0	100.0%
Total		Count	152	148	0	0	300
		% within GROUP	50.6%	49.3%	0	0	100.0%

The percentage of patients in group ML with MPC I and II are 56% and 44 % .

The percentage of patients in group TVL with MPC I is 52% and MPC II is 48 %.

The percentage of patients in group KVL with MPC I is 44% and MPC II is 56 %.

On analyzing the data statistically p value is found to be 0.02, hence statistically insignificant.

Figure17. BAR CHART COMPARING MALLAMPATTI CLASSIFICATION BETWEEN THE GROUPS

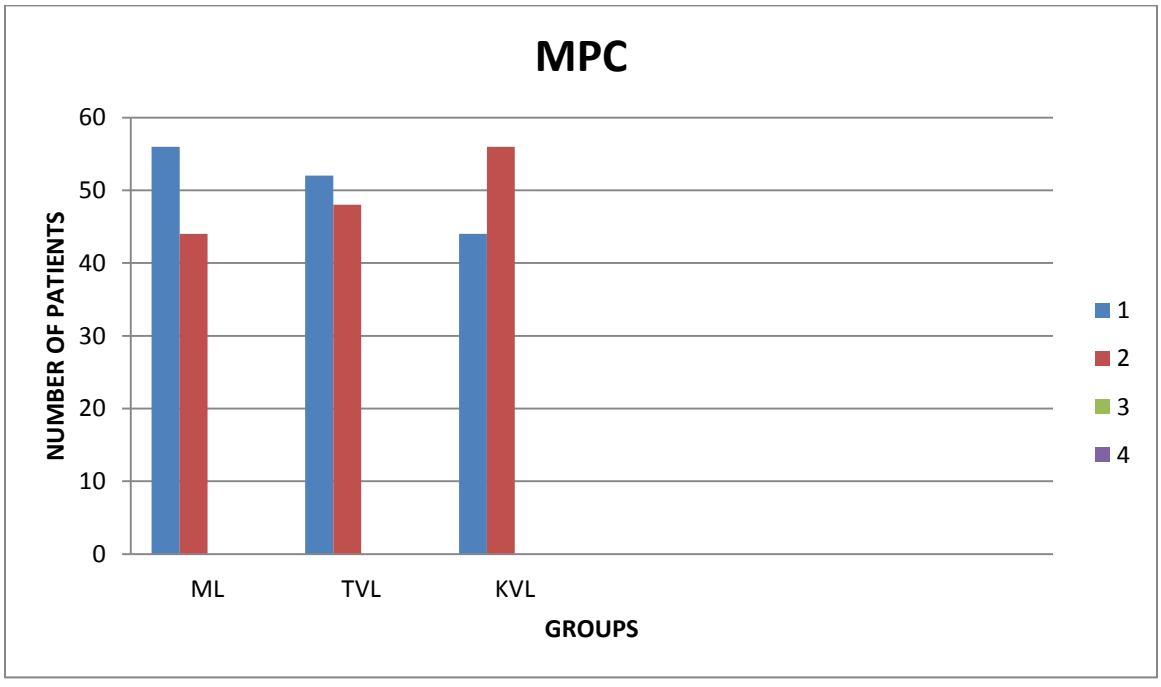


Table 4. COMPARISON OF CORMACK LEHANE GRADE

			LARYNOGOSCOPY_VIEW				
			CLGRADE 1	CLGRADE 2	CLGRADE 3	CLGRADE 4	Total
GROUP	ML	Count	34	64	2	0	100
		% within GROUP	34.0%	64.0%	2.0%		100.0%
	TVL	Count	53	47	0	0	100
		% within GROUP	53.0%	47.0%	0%		100.0%
	KVL	Count	55	45	0	0	100
		% within GROUP	55.0%	45.0%	0%		100.0%
Total		Count	142	156	2	0	300
		% within GROUP	47.3%	52.0%	.7%		100.0%

The percentage of patients in group ML with CL grade I are 34%, grade II are 64% and grade III are 2%.

The percentage of patients in group TVL with CL grade I are 53%, grade II are 47% and grade III are 0%.

The percentage of patients in group KVL with CL grade I are 55%, grade II are 45% and grade III are 0%.

On analyzing the data statistically p value is found to be 0.008 and is hence statistically significant .

Figure18. BAR CHART COMPARING CORMACK LEHANE GRADE BETWEEN THE GROUPS

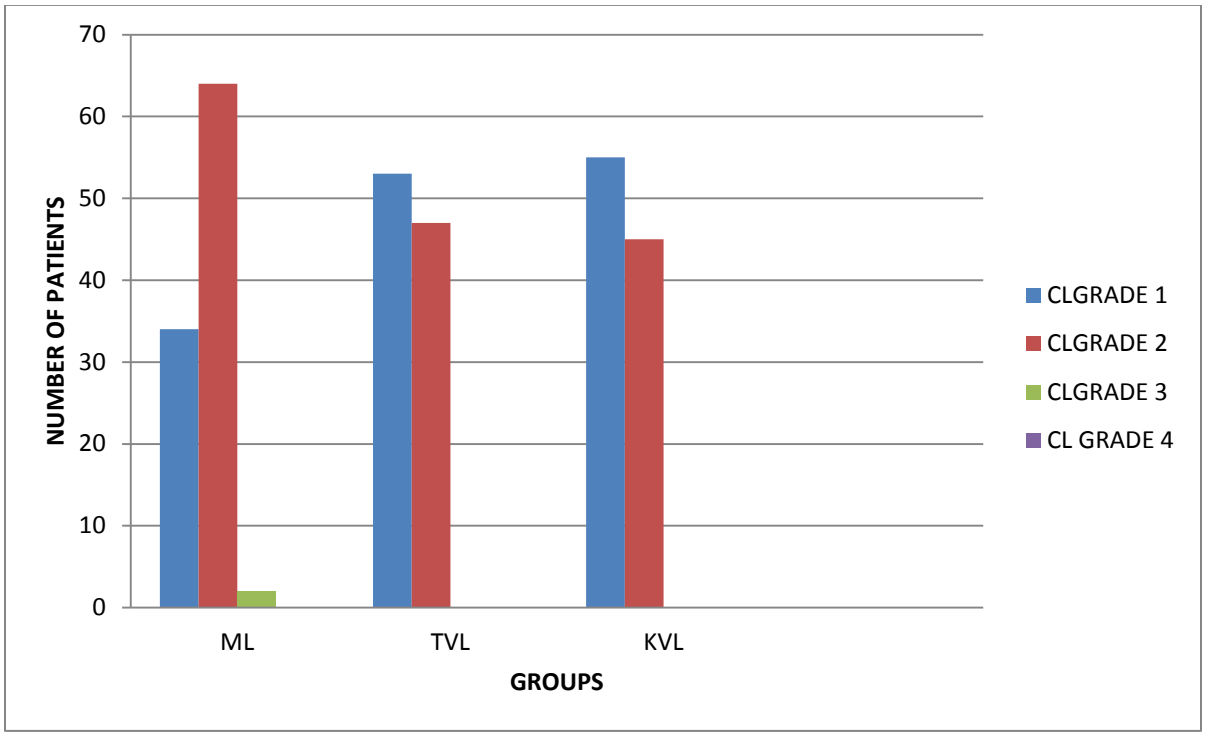


Table 5. COMPARISON OF INTUBATION DIFFICULTY SCORE

			INTUB_ DIFF_ SCORE				Total
			0	1	2	3	
GROUP	ML	Count	87	11	2	0	100
		% within GROUP	87.0%	11.0%	2.0%	.0%	100.0%
	TVL	Count	95	3	0	2	100
		% within GROUP	95.0%	3.0%	.0%	2.0%	100.0%
	KVL	Count	77	20	0	3	100
		% within GROUP	77.0%	20.0%	.0%	3.0%	100.0%
Total		Count	259	34	2	5	300
		% within GROUP	86.3%	11.3%	.7%	1.7%	100.0%

The percentage of patients in group ML with Intubation difficulty score 0 are 87% score 1 are 11% and score 2 are 0% .

The percentage of patients in group TVL with Intubation difficulty score 0 are 95 %, score 1are 3% and score are 0 % and score 3 are 2 %.

The percentage of patients in group KVL with Intubation difficulty score 0 are 77%, score 1 are 20%, score 2 are 0% and score3 are 3 %.

On analyzing the data statistically p value is found to be 0.002 and is hence statistically significant .

Figure19. BAR CHART COMPARING INTUBATION DIFFICULTY SCORE BETWEEN THE GROUPS

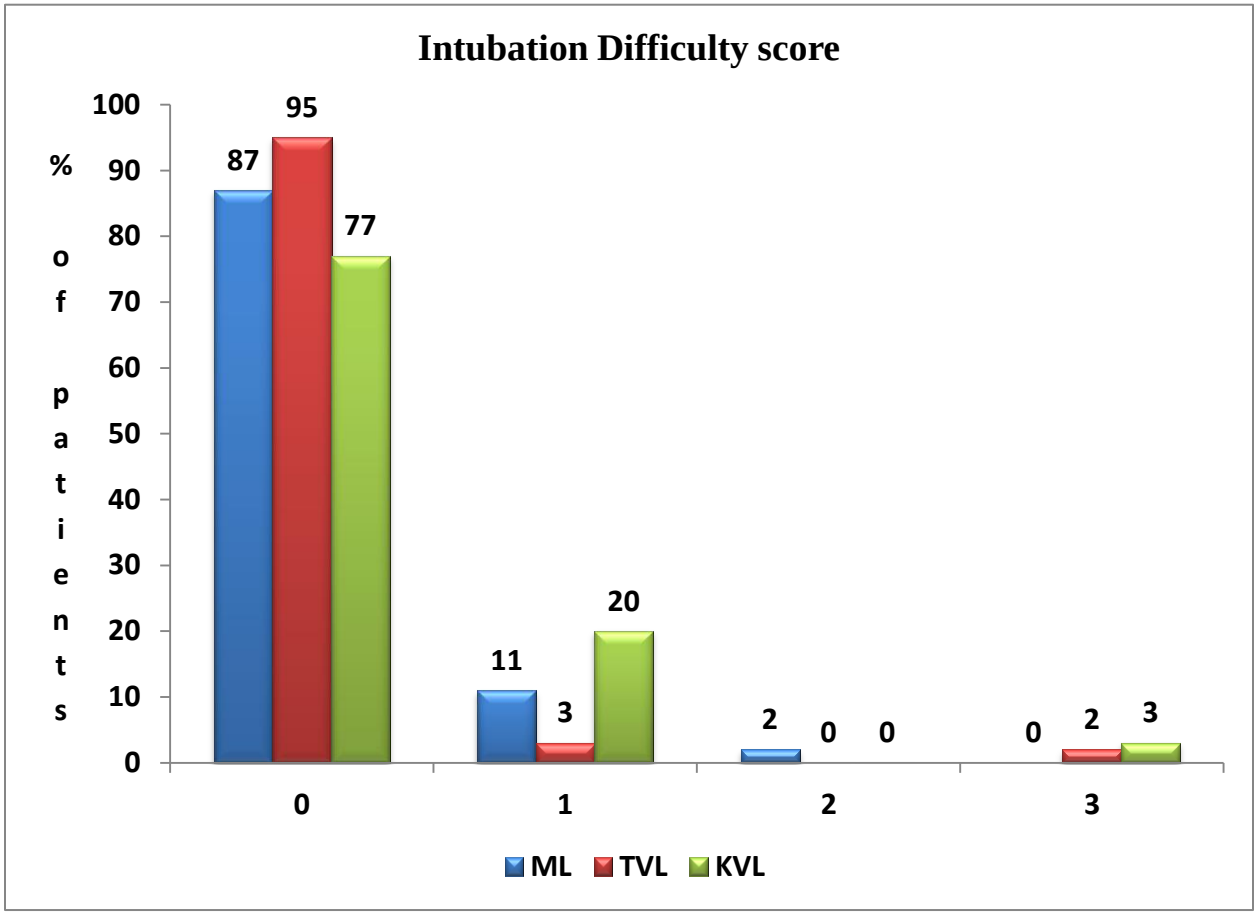
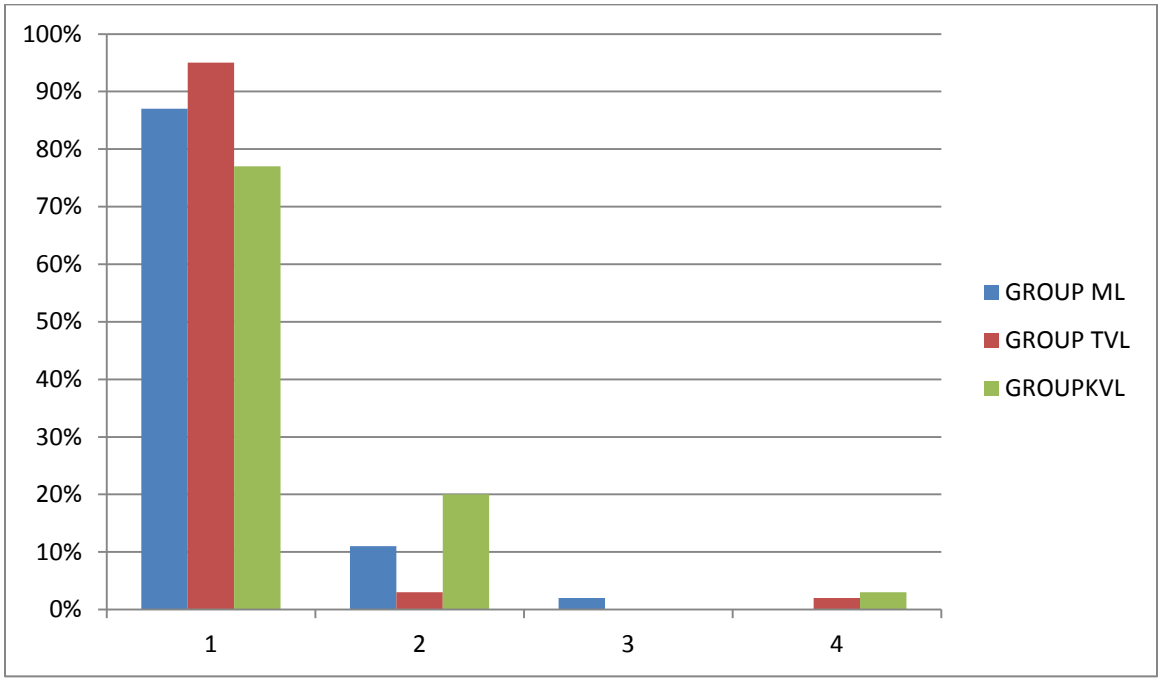


Table 6. COMPARISION OF EASE OF INTUBATION GRADE

			EASE OF INTUBATION GRADE				Total
			1	2	3	4	
GROUP	ML	Count	87	11	2	0	100
		% within GROUP	87.0%	11.0%	2.0%	.0%	100.0%
	TVL	Count	95	3	0	2	100
		% within GROUP	95.0%	3.0%	.0%	2.0%	100.0%
	KVL	Count	77	20	0	3	100
		% within GROUP	77.0%	20.0%	.0%	3.0%	100.0%
Total		Count	259	34	2	5	300
		% within GROUP	86.3%	11.3%	.7%	1.7%	100.0%

Figure20. BAR CHART COMPARING EASE OF INTUBATION GRADING BETWEEN THE GROUPS



The percentage of patients in group ML with Ease of Intubation grade 1are 87%

Grade 2 are 11%, grade 3 are 2 % and grade 4 are 0%.

The percentages of patients in group TVL with Ease of Intubation grade 1 are 95%

Grade 2 are 3%, grade 3 are 0 % and grade 4 are 2%.

The percentages of patients in group KVL with Ease of Intubation grade 1 are 77%

Grade 2 are 20%, grade 3 are 0 % and grade 4 are 3%. On analyzing the data statistically p value is found to be 0.002 and is hence statistically significant.

Table7. COMPARISION OF POGO SCORE

POGO SCORE (%)	ML	84.50	100
GROUP	TVL	86.25	100
	KVL	84.95	100
	Total	MEAN 85.23	300

The mean percentage of glottis opening score of patients in group ML is 84.5 %.

The mean percentage of glottis opening score of patients in group TVL is 86.25 %.

The mean percentage of glottis opening score of patients in group KVL is 84.95 %.

On analyzing the data statistically p value is found to be 0.042 and is hence statistically significant .

Figure21. BAR CHART COMPARING POGO SCORE BETWEEN THE GROUPS

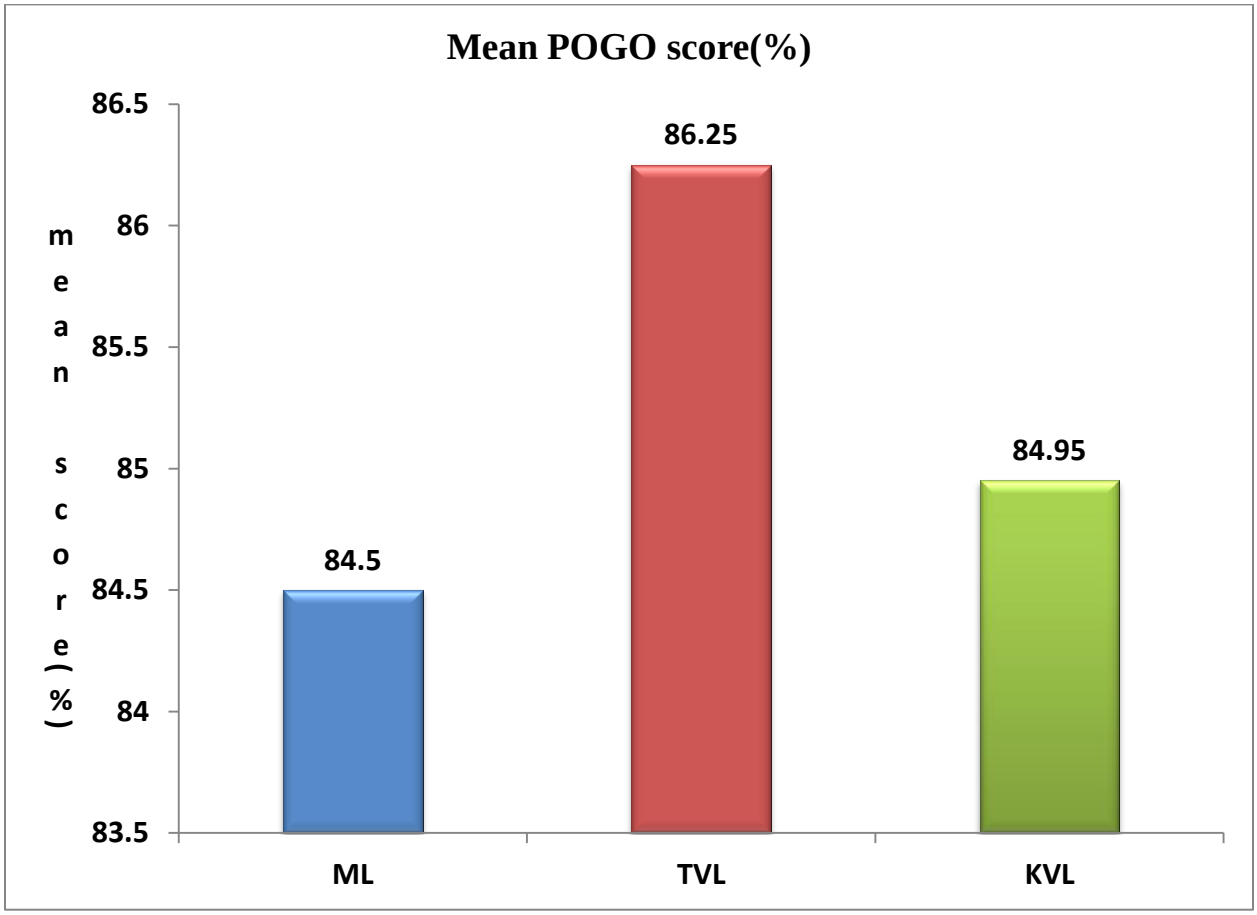


Table 8. COMPARISON OF TIME TAKEN FOR INTUBATION

TTI seconds	ML	24.21 seconds
	TVL	27.92 seconds
	KVL	27.87 seconds
	Mean	26.67 seconds

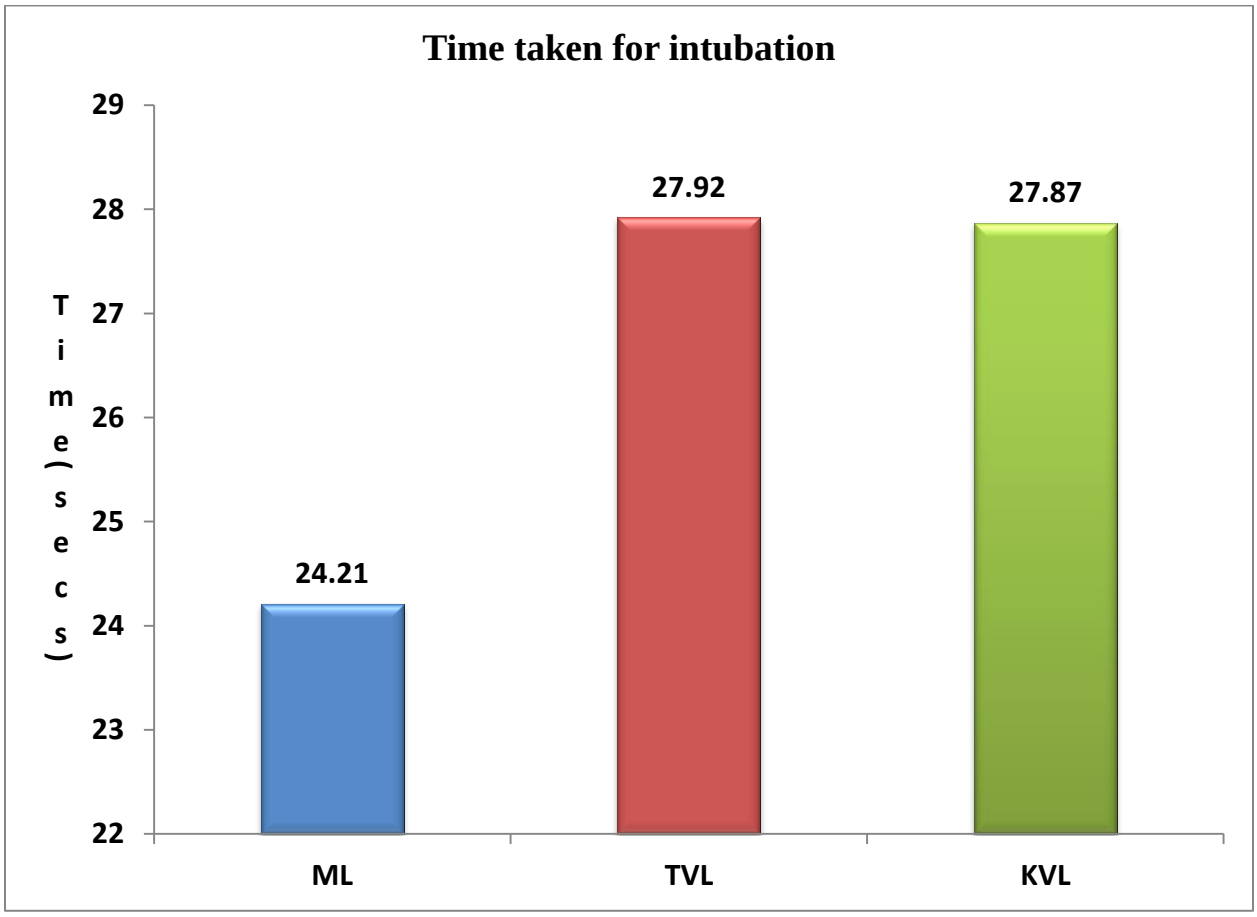
The mean time taken for intubation of patients in group ML is 24.21 seconds.

The mean time taken for intubation of patients in group TVL is 27.92 seconds.

The mean time taken for intubation of patients in group KVL is 27.87 seconds.

On analyzing the data statistically p value is found to be 0.000 and is hence statistically significant .

Figure22. BAR CHART COMPARING TIME TAKEN FOR INTUBATION BETWEEN THE GROUPS



COMPARISION OF SUCCESSFUL PLACEMENT OF ENDOTRACHEAL TUBE:

The percentage of patients in Group ML with successful placement of endotracheal tube was 100%

The percentage of patients in Group TVL with successful placement of endotracheal tube was 96%

The percentage of patients in Group KVL with successful placement of endotracheal tube was 97%

On analyzing the data, the p value is 0.14 hence statistically not significant.

COMPLICATIONS:

There were no complication in any of the three groups. The complications anticipated were trauma to lip, oral cavity and other airway structures. Other complications such as hoarseness of voice and bleeding from trauma to airway structures were anticipated.

CHAPTER 6

DISCUSSION

Macintosh laryngoscopes remain the most widely used in anaesthesiology though various types of video laryngoscopes with different technical specifications and operational characteristics have been developed. The newer laryngoscopes through the optical apparatus provide improved glottis view. It is also noted that they require more skillful hand and eye coordination during the procedure due to the indirect image.

In the video laryngoscopes, problems occur while guiding the endotracheal tube as the tube can be seen only at vocal cord level.

Video-laryngoscopes is superior to direct laryngoscopes as they provide superior view of larynx.

In our study, we conducted a prospective randomized study to compare the Macintosh laryngoscope, Truview EVO2 and King vision laryngoscope for intubation of patients for elective surgical procedure requiring general anaesthesia.

AGE AS A VARIABLE

Age group between 18-60 years were included in the study, to establish uniformity in the study group.

WEIGHT AND HEIGHT AS A VARIABLE

In our study patients with BMI < 30 kg m^{-2} were included .Obese patients were excluded from the study group. In group ML, the mean BMI was 21.93 kgm^{-2}, in Group TVL was 22.13 kgm^{-2} and in group KVL was 22.07 kgm^{-2}. We found no significant difference statistically with respect to weight and height measured in terms of BMI .

GENDER AS A VARIABLE

In this study both the genders were included, so that the parameters observed and the result can be projected to the general population. The percentage of females included in the study outnumbered the females by 10%, but was not statistically significant.

MALLAMPATTI CLASSIFICATION AS A VARIABLE

In our study we included the patients with Mallampatti classification of 1 and 2. Higher grades of MPC were excluded from the study since we cannot compare the intubation parameters for routine airway management in difficult airway patients. They might show a bizarre response and standardization cannot be done. The percentage of patients in group ML with MPC 1 and 2 were 56% and 44% respectively, the percentage of patients in group TVL with MPC 1 and 2 were 52% and 48% and the percentage of patients in Group KVL with MPC 1 and MPC 2 were 44 % and 56 % respectively .The groups were therefore comparable.

AMERICAN SOCIETY OF ANAESTHESIOLOGY PHYSICAL STATUS AS A VARIABLE

Patients with ASA 1 and 2 were included in the study .Patients with hypertension, Diabetes, Obesity, Cardiovascular illness, Thyroid disorder were excluded from the study.

Thus we conclude in the study with demography and airway assessment as a tool, there was no significant differences in both the groups with respect to age ,sex, Mallampatti classification, American society of anesthesiologists physical status

classification. They were found to be statistically insignificant. The groups hence were comparable.

CORMACK LEHANE GRADING BETWEEN THE GROUPS

From the study, the following observations are noted.

In group ML, out of 100 patients 34 patients had CL grade 1 and 64 patients had CL grade 2. It is observed that there is a statistically significant better glottis view with group TVL, in which 53 patients had CL grade 1 and 47 patients had CL grade 2 and group KVL, where 55 patients had CL grade 1 and 45 patients had CL grade 2. The optical principle in Truview laryngoscope and the indirect view of the glottis through the camera at the distal tip in King vision laryngoscope provides improved laryngeal view. Li et al has found similar results that Truview laryngoscope provides better laryngeal view when compared with Macintosh laryngoscope.[23]

Leung et al also demonstrated an easy laryngeal view with Truview laryngoscope on comparison with Macintosh and McCoy laryngoscopes.[32]

Suman Arora et al noted a significant improvement in glottis view when Truview laryngoscope was used, laryngeal view was grade 2 or less in 98% of cases with

Truview blade compared to 78 % of cases showing similar grades with Macintosh blade.[25]

Maharaj et al also found results similar to the present study in which Airtraq laryngoscope was compared with Macintosh laryngoscope in a manikin study, wherein Airtraq laryngoscope provided better glottic view.[33]

Cooper et al in his study compared glidescope with direct laryngoscope and has documented improved laryngeal view with glidescope.[34]

COMPARISON OF EASE OF INTUBATION GRADE BETWEEN THE GROUPS .

In the present study, from the observations Ease of intubation grading is noted to have statistical significance in the three groups that were compared.

In the Truview EVo2 , grade 1 is seen in 95% cases and In Kingvision laryngoscope group 77 % cases were grade 1.

In TVL group we had two cases of failed intubation, and

In KVL group ,there were 3 cases of failed intubation, and intubated using conventional Macintosh laryngoscope.

In both the groups, the reason for failed intubation was difficulty in placement of endotracheal tube. In King vision laryngoscope the presence of the guiding channel requires a rotational movement rather than external laryngeal manipulation for glottis insertion. In Truview laryngoscope, the curve of the intubating stylet is of great importance in proper intubation.

Singh et al in his study has also found ease of intubation grading to be better with Macintosh laryngoscope when compared with Truview laryngoscope.[28]

Saxena et al had ease of intubation to be better with Macintosh compared with Truview laryngoscope, they discussed the reason for the observation as Truview Laryngoscope requires an indirect view, where the tube seen through the lens for intubation and advanced blindly. The tube is visualized only on entering the optic field of vision. The anaesthesiologist while using Macintosh laryngoscope, negotiates the tube under direct vision.[26]

Namazi et al in their study found grade 1 of 73 % with Truview laryngoscope when compared with King vision laryngoscope which was 66 %, similar to the present study.[31]

COMPARISON OF POGO (PERCENTAGE OF GLOTTIC OPENING) SCORE:

Based on previous studies, POGO score is shown to have better sensitivity than Cormack Lehane grading. It is also found to have good intra and inter-observer reliability.[35]

In the present study, the following observations are made. There is statistically better POGO score with Truview laryngoscope when compared with Macintosh and King vision laryngoscope.

Leung et al had similar observations showing higher POGO score in patients intubated with Truview laryngoscope compared to Macintosh and Mc Coy laryngoscope.[32] Similar results were observed by Timanaykar et al in the study when Truview laryngoscope was compared with Macintosh laryngoscope[36.]

COMPARISON OF TIME TAKEN FOR INTUBATION BETWEEN THE GROUPS

Based on the observations from the study, it is noted that there is statistical significance difference in the time taken for intubation.

In Group ML ,the mean time taken for intubation was 24.21 seconds, comparatively lesser duration as in Group TVL is it 27.92 seconds and in Group KVL 27.87 seconds.

Tutuncu et al has discussed in his study that the prolongation of the intubation process with Truview can be attributed to the midline entrance which may cause difficulty in manipulation of tongue[24] .

Saxena et al also noted an increase in time for intubation with Truview laryngoscope when compared with Macintosh laryngoscope[26.] Namazi et al observed results similar to the present study, wherein King vision laryngoscope required significantly more time for intubation in comparison with Macintosh laryngoscope. In the study, time taken for intubation with King vision laryngoscope was more when compared with Truview laryngoscope.[31]

The main limitation of our study was that, the anesthetist performing the intubation was not blinded to the study group due to the unfeasibility of blinding and the possibility of bias existed. The experience of the anesthetist with the Macintosh laryngoscope was far more and better than that with the Truview and King vision video laryngoscope.

SUCCESSFUL PLACEMENT OF ENDOTRACHEAL TUBE:

In the study there was 100% successful intubation with Macintosh laryngoscope, with Truview laryngoscope there was 97 % success in placement of endotracheal tube and King vision laryngoscope had 96 % success rate. The failed intubation with video laryngoscope were intubated successfully with Macintosh laryngoscope.

In Truview laryngoscope, difficulty was faced with stylet loaded endotracheal tube, where the distal curvature of the stylet is important.

In king vision laryngoscope, the failure was with the blade which required appropriate distance from the glottis, and rotational movements for intubation.

CHAPTER 7

CONCLUSION

The purpose of this study was to determine the efficacy of the video laryngoscopes for intubation in routine airway. Truview and Kingvision laryngoscopes had better laryngeal view in terms of Cormack Lehane grading and POGO scores, though the time taken for intubation was prolonged with both the video laryngoscope when compared with Macintosh laryngoscope. Hence from my study I conclude that both the video laryngoscopes are superior to Macintosh laryngoscope in terms of laryngeal view and are recommended for routine airway management , and Truview laryngoscope has the advantage of continuous oxygen insufflation. Further, more training in the Kingvision and Truview laryngoscope is required to determine its usefulness in difficult airway situations.

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தகவல் தாள்

இந்த ஆராய்ச்சியை பற்றி முக்கியமான தகவல்களை தெரிந்து கொண்டு இதில் பங்கேற்க உங்கள் சம்மதத்தை தெரிவிக்குமாறு நாங்கள் விடுத்த வேண்டு கோளை ஏற்றுக் கொண்டமைக்கு நன்றி.

இந்த ஆராய்ச்சி சம்மந்தமான தகவல்கள், இதில் பங்கு பெறுவதால் ஏற்படக்கூடிய அசௌகரியங்கள், நன்மைகள் அனைத்தும் இப்படிவத்தில் கொடுக்கப்பட்டிருக்கின்றன. உங்களுக்கு ஏதேனும் புரியவில்லை என்றாலும் அல்லது கூடுதல் தகவல்கள் ஏதேனும் தேவை என்றாலும் நாங்கள் உங்களுக்கு உதவ தயராக இருக்கிறோம்.

1. இந்த ஆய்வின் நோக்கம் என்ன?

இந்த ஆய்வின் நோக்கம் அறுவை சிகிச்சையின் போது முழு மகயக்கம் அடைய மருந்து செலுத்தும் போது Endo Tracheal Tube-ஐ செலுத்துவதற்கு Laryngoseopy வகைகளில் macintosh அல்லது Kingvision அல்லது True view இதில் எது சிறந்தமுறை என்று கண்டறிவது.

2. இந்து மருத்துவ சோதனையில் யார் பங்கேற்க முடியும்?

இதில் முன்பதிவு செய்து முழு மயக்கத்துடன் கூடிய அறுவை சிகிச்சை செய்ய வயது 18 முதல் 63 வயது வரை உள்ளவர்கள் பங்கேற்கலாம்.

3. இந்த ஆய்வில் யார் பங்கேற்கக் கூடாது?

அதிகரித்த எடை, கழுத்து எலும்பு முறிந்தவர்கள், மண்டைக்குள் அதிக இரத்த அழுத்தம் உள்ளவர்கள், அவசர அறுவை சிகிச்சைக்கு வருவபர்கள் மற்றும் தசை நோய்கள் உள்ளவர்கள்.

4. இந்த செய்முறையன் நன்மைகள் என்ன ?

இந்த ஆய்வின் மூலம் மேல் சொன்ன முறைகளில் எது சிறந்த முறை என கண்டறிய முடியும்.0

5. இந்த செய்முறையின் போது நோயாளிகளுக்கு ஏற்படும் அசௌகரியங்கள் என்ன?

இந்த ஸ்கோப்பியை செலுத்தும் போது சில நேரம் நோயாளியின் வாயில் சிறு காயம் ஏற்படலாம்.

6. இந்த மருத்துவ சோதனையில் சேருவது கட்டாயமா?

இல்லை _____உங்கள் விருப்பம்.

7. என்னை பற்றிய தகவல் ரகசியமாக இருக்குமா?

ஆம். நீங்கள் விரும்பினால் ஆய்வின் முடிவு கிளை எங்களிடம் பெற்றுக் கொள்லாம்.

ஆராய்ச்சியில் பங்குபெற ஒப்புதல், உறுதி மொழி அளிக்கும் படிவம்.

ஆராய்ச்சியின் பெயர் : லரிங்கோ ஸ்க்கோபி முறையில் Endotracheal Tube-ஐ செலுத்துவதற்கு மெக்கிண்டாஸ், கிங் விசன், ட்ரூவியூ இவற்றில் எது சிறந்தது என்று கண்டறிதல். இந்த ஆராய்ச்சியை பற்றிய முழு விவரங்களளும் என் தாய் மொழியில் தரப்பட்டன. இந்த ஆராய்ச்சியை பற்றி முழுமையாக தெரிந்து கொண்டேன். இதில் நான் பங்கு பெறுவதினால் எனக்க ஏற்படக்கூடிய அசௌகரியங்கள் மற்றும் நன்மைகள் பற்றியும் தெரிந்து கொண்டேன்.

இந்த ஆராய்ச்சியிலிருந்து என் சுய விருப்பப்படி எந்த நேரமும் விலகிக் கொள்ள முடியும் என்றும், அதனால் இம்மருத்துவமனையில் எனக்கு கிடைக்க வேண்டிய மருத்துவ உதவிகள் அனைத்தும் எந்த பாரபட்சமும் இல்லாமல் தொடர்ந்து கிடைக்கும் என்றும் தெரிந்து கொண்டேன்.

இதில் பங்கு பெற எனக்கு எந்த வித சன்மானமும் தரப்பட மாட்டாது, என்று புரிந்து கொண்டேன்.

இந்த ஆராய்ச்சியின் முடிவுகள் என்னைப்பற்றிய தனிப்பட்ட தகவல் ஏதும் தராமல் இருந்தால், மருத்துவம் சார்ந்த பத்திரிக்கைகளில் பிரகரமாவதற்கு எதிர்ப்பு தெரிவிக்க மாட்டேன்.

இந்த ஆராய்ச்சியில் பங்கு பெற நான் என்ன செய்ய வேண்டும் என்று தெரிந்து கொண்டேன். அதன்படி முழு ஒத்துழைப்பு கொடுக்க தயாராக உள்ளேன்.

பங்குபெறுபவரின்
கையொப்பம்_____ தேதி _____ முகவரி _____

ஆராய்ச்சியாளரின் கையொப்பம் _____தேதி _____

PROFORMA:

NAME: AGE/SEX: IP NO.:

DATE: Wt.: GROUP:

DIAGNOSIS:

SURGERY:

BRIEF HISTORY:

COEXISTING ILLNESS:

EXAMINATION:

PR: CVS:

BP: RS:

INVESTIGATIONS:

Hb: BLOOD UREA:

SUGAR:

Sr. CREATININE:

ANESTHESIA DETAILS:

AIRWAY : MPC I / MPC II

DENTITION

NECK

SPINE

ASSESSMENT: ASA I / ASA II

PREMEDICATION:

INDUCTION:

PARAMETERS OBSERVED:

EASE OF INTUBATION

GRADE 1	
GRADE 2	
GRADE 3	
GRADE 4	

INTUBATION DIFFICULTY SCORING

IDS SCORE	DEGREE OF DIFFICULTY	OBSERVATION
0	EASY	
0-5	SLIGHTLY DIFFICULT	
>5	MODERATE TO MAJOR DIFFICULTY	
INFINITY	IMPOSSIBLE	

CORMACK LEHANE GRADING

GRADE 1	FULL VIEW OF GLOTTIS	
GRADE 2	PARTIAL VIEW OF GLOTTIS	
GRADE 3	ONLY EPIGLOTTIS SEEN	
GRADE 4	NEITHER EPIGLOTTIS NOR GLOTTIS SEEN	

TIME TAKEN FOR INTUBATION:

SUCCESSFUL PLACEMENT OF ENDOTRACHEAL TUBE: YES /NO

POGO (PERCENTAGE OFGLOTTIC OPENING SCORE):

S.NO	DATE OF SURGERY	NAME	AGE	SEX	IP NUMBER	GROUP	DIAGNOSIS	PROCEDURE	WEIGHT	HEIGHT	BMI	MALLAMPATI SCORE	HEAD POSITION	LARYNOGOSCOPY VIEW	TTI(secs)	INTUBATION DIFFICULTY SCORE	EASE OF INTUBATION	POGO SCORE	NUMBER OF ATTEMPTS	
1	02.01.16	VENKATARAMAN	25	M	1540986	ML	DNS	FESS	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	41	2	GRADE 2	70	1	
2	02.01.16	RAMALINGAM	25	M	1534675	ML	DNS	FESS	57	159	22.55	MPC I	NEUTRAL	CL GRADE 1	15	0	GRADE 1	80	1	
3	02.01.16	VAISHNAVI	24	F	1639874	TVL	FIBROADENOMA	EXCISION	55	160	21.48	MPC I	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
4	02.01.16	ANANDHI	33	F	1542098	KVL	ACUTE APPENDICITIS	LAP APPENDICECTOMY	51	158	20.43	MPC I	NEUTRAL	CL GRADE 1	45	0	GRADE 1	90%		
5	02.01.16	RAJENDRAN	50	M	1564328	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	60	167	21.51	MPC I	NEUTRAL	CL GRADE 1	38	0	GRADE 1	85	1	
6	02.01.16	SRIDHAR	29	M	1567543	ML	CSOM	TYMPANOPLASTY	80	180	24.69	MPC I	NEUTRAL	CL GRADE 2	17	1	GRADE 2	80	1	
7	04.01.16	ELUMALAI	40	M	1640500	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	60	163	22.58	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
8	04.01.16	RESHMA	31	F	1546798	KVL	RT CSOM	RT TYMPANOPLASTY	63	162	24.01	MPCII	NEUTRAL	CL GRADE 2	33	0	GRADE 1	80	1	
9	04.01.16	NADHIYA	26	F	1642367	TVL	LIPOMA	EXCISION	55	163	20.7	MPC II	NEUTRAL	CL GRADE 2	28	1	GRADE 1	85	1	
10	04.01.16	SHEIK MOHD	38	M	1638761	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	49	158	19.62	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
11	04.01.16	SARAVANAN	32	M	1527865	KVL	DNS	FESS	73	173	23.39	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
12	05.01.16	MALLIGA	18	F	1543652	ML	SINONASAL POLYPOS	FESS	58	167	20.8	MPC II	NEUTRAL	CLGRADE 2	20	1	GRADE 2	80	1	
13	05.01.16	SUSEELA	57	F	1576432	KVL	ABDOMINAL PAIN	D LAP AND PROCEES	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
14	05.01.16	KALAISEVI	26	F	1640703	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	56	157	22.71	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
15	05.01.16	RASIKA	20	F	1532456	ML	RT CSOM	RT TYMPANOPLASTY	55	155	22.89	MPC I	NEUTRAL	CLGRADE 1	25	0	GRADE 1	85	1	
16	05.01.16	DEEPA	28	F	1564378	KVL	DNS	SEPTOPLASTY	52	160	20.31	MPC I	NEUTRAL	CL GRADE 1	31	0	GRADE 1	90	1	
17	06.01.16	AMUDHA	31	F	1543908	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	60	156	24.65	MPC I	NEUTRAL	CL GRADE 1	15	0	GRADE 1	90	1	
18	06.01.16	NIRMALA	32	F	1533245	ML	RT CSOM	RT TYMPANOPLASTY	50	154	21.08	MPC II	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
19	06.01.16	THIRUPATHI	18	M	1640852	TVL	ABDOMINAL PAIN	LAP APPENDICECTOMY	65	170	22.49	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
20	06.01.16	DIVYA	25	F	1565213	ML	DNS	SEPTOPLASTY	54	160	21.09	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	80	1	
21	07.01.16	KATHIRAVEL	44	M	1547854	ML	CHRONIC SINUSITIS	FESS	62	165	22.77	MPC I	NEUTRAL	CL GRADE 1	38	0	GRADE 1	90	1	
22	07.01.16	NAGAMMA	38	F	1640004	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	54	158	21.63	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 2	80	1	
23	07.01.16	MUNUSAMY	45	M	1642064	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	60	160	23.48	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
24	07.01.16	MARIMUTHU	18	M	1531142	ML	ACUTE APPENDICITIS	LAP APPENDICECTOMY	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
25	07.01.16	ANNAMAKKA	40	F	1564387	KVL	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	59	162	22.48	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	90	1	
26	08.01.16	NAGARAJ	46	M	1641197	TVL	DNS	SEPTOPLASTY	63	172	21.3	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
27	08.01.16	SELVI	40	F	1546785	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	85	1	
28	08.01.16	DEVI	25	F	1539087	ML	ACUTE APPENDICITIS	LAP APPENDICECTOMY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	80	1	
29	08.01.16	VEERARAJ	29	M	1567438	KVL	CHRONIC SINUSITIS	FESS	64	166	23.33	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
30	09.01.16	DEEPALAKSHMI	38	F	1577643	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	159	24.52	MPC II	NEUTRAL	CL GRADE 2	45	4	GRADE 4	70	2	
31	09.01.16	MOHD ARIF	18	M	1642082	TVL	CHRONIC TONSILITIS	TONSILLECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	2	
32	09.01.16	MAHIMA	40	F	1544326	KVL	CHRONIC SINUSITIS	FESS	56	166	20.32	MPC I	NEUTRAL	CL GRADE 1	36	0	GRADE 1	80	1	
33	11.01.16	DIVYA	35	F	1568954	ML	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	50	154	21.08	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
34	11.01.16	ROSY	25	F	1547865	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	157	20.28	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
35	11.01.16	VIMALA	36	F	1534276	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	55	156	22.6	MPC II	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
36	11.01.16	MADHU	38	F	1640809	TVL	SNG THYROID	HEMITHYROIDECTOMY	57	158	22.83	MPC II	NEUTRAL	CL GRADE 1	24	0	GRADE 1	90	1	
37	11.01.16	VAISHNAVI	25	F	1547861	KVL	FIBROADENOMA	EXCISION BIOPSY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	30	0	GRADE 1	85	1	
38	12.01.16	SETHUPATHI	21	M	1577864	KVL	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	67	165	24.61	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	90	1	
39	12.01.16	GUNASEKARAN	18	M	1642113	TVL	APPENDICULAR ABCE	APPENDICECTOMY	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
40	12.01.16	GEETHA	33	F	1564890	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	85	1	
41	12.01.16	MANIKANADAN	25	M	1544098	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	57	156	20.94	MPC I	NEUTRAL	CL GRADE 1	22	0	GRADE 1	80	1	
42	12.01.16	SUMATHI	50	F	1544760	KVL	DNS	FESS	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
43	13.01.16	GANESAN	36	M	1543765	ML	D8 FRACTURE	POSTERIOR STABILISATION	67	170	23.18	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
44	13.01.16	NATARJAN	60	M	1641427	TVL	RT CSOM	MOD. RADICAL MASTOIDECTOMY	66	170	22.84	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	85	1	
45	13.01.16	VASUGI	31	F	1642352	TVL	FIBROADENOMA	EXCISION	57	156	23.42	MPC1	NEUTRAL	CL GRADE1	24	0	GRADE 1	90	1	
46	13.01.16	PREMANATHAN	17	M	1601324	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	63	168	22.32	MPC I	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
47	14.01.16	SARAVANAN	35	M	1548750	KVL	RT CSOM	RT TYMPANOPLASTY	76	175	24.82	MPC II	NEUTRAL	CL GRADE 2	41	0	GRADE 1	90	1	
48	14.01.16	VIJAYA	48	F	1577645	KVL	MRM WOUND GAPIN	WOUND RESUTURING	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	50	4	GRADE 4	80	2	
49	14.01.16	JOTHI	30	F	1590876	ML	DNS	FESS	56	160	21.88	MPC I	NEUTRAL	CL GRADE 1	37	0	GRADE 1	85	1	
50	14.01.16	VASANTHI	39	F	1638325	TVL	ABDOMINAL PAIN	D LAP AND PROCEED	60	158	24.03	MPC I	NEUTRAL	CL GRADE 2	31	1	GRADE 1	85	1	
51	14.01.16	AMUDHAN	19	M	1558765	KVL	DNS	SEPTOPLASTY	62	166	22.5	MPC I	NEUTRAL	CL GRADE 1	16	0	GRADE 1	90	1	
52	14.01.16	RAMU	22	M	1600987	ML	DNS	SEPTOPLASTY	60	164	22.31	MPC I	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
53	16.01.16	VINEETHA	37	F	1589765	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
54	16.01.16	MUHTU	35	M	1566098	KVL	D7-D8 FRACTURE	D7-D8 DISCECTOMY	67	172	22.65	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
55	16.01.16	GNANASUNDARI	26	F	1642097	TVL	MNG THROID	TOTAL THYROIDECTOMY	52	156	21.37	MPC II	NEUTRAL	CL GRADE2	30	1	GRADE 1	90	1	
56	16.01.16	VENKATACHALAM	40	M	1630128	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	60	167	21.51	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	90	1	
57	16.01.16	VISHNU	19	M	1578456	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	59	162	22.48	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
58	18.01.16	PREMKUMAR	22	M	1582108	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	57	165	20.94	MPC I	NEUTRAL	CL GRADE 2	32	2	GRADE 2	80	1	
59	18.01.16	MARIAPPAN	60	M	1562891	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	65	168	23.03	MPC I	NEUTRAL	CL GRADE 2	25	1	GRADE 1	80	1	
60	18.01.16	SUMATHI	40	F	1643547	TVL	DNS	SEPTOPLASTY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	85	1	

61	18.01.16	RAMALINGAM	50	M	1572380	ML	CHRONIC SINUSITIS	FESS	60	163	22.58	MPC II	NEUTRAL	CL GRADE 2	30	2	GRADE 2	80	1	
62	18.01.16	RAVI	50	M	1544865	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	64	166	23.33	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
63	18.01.16	MOHINI	45	F	1566098	KVL	ABD PAIN FOR EVALU	D LAP AND PROCEED	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE1	95	1	
64	19.01.16	DEEPA	27	F	1567322	ML	DNS	SEPTOPLASTY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
65	19.01.16	KARTHIK	16	M	1555689	KVL	DNS	SEPTOPLASTY	67	165	24.61	MPC II	NEUTRAL	CL GRADE 2	40	1	GRADE 2	80	1	
66	19.01.16	ASHOK	24	M	1600764	TVL	CHRONIC SINUSITIS	FESS	60	165	22.04	MPC II	NEUTRAL	CL GRADE2	26	1	GRADE 1	90	1	
67	19.01.16	PUSHPALATHA	40	F	1641108	TVL	LT CSOM	MYRINGOPLASTY	57	160	22.27	MPC II	NEUTRAL	CL GRADE 2	45	3	GRADE 4	70	2	
68	19.01.16	MAHESWARI	48	F	1572302	ML	DNS	SEPTOPLASTY	45	150	20	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
69	20.01.16	KUPPUSAMY	45	M	1544378	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	51	158	20.43	MPC I	NEUTRAL	CL GRADE 2	30	1	GRADE 1	90	1	
70	20.01.16	SAROJA	57	F	1560012	ML	RT CSOM	RT TYMPANOPLASTY	60	161	23.15	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
71	20.01.16	RAJU	19	M	1564290	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	64	166	23.33	MPC II	NEUTRAL	CL GRADE 2	29	`1	GRADE1	85	1	
72	20.01.16	KALAIARASI	35	F	1563498	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	55	158	22.03	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
73	20.01.16	LALITHA	47	F	1564223	ML	CHRONIC SINUSITIS	FESS	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	28	1	GRADE 1	80	1	
74	21.01.16	VARADHARAJAN	52	M	1644210	TVL	SNG THYROID	HEMITHYROIDECTOMY	67	165	24.61	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	90	1	
75	21.01.16	GIRIDHARAN	17	M	1562781	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	60	170	20.76	MPC II	NEUTRAL	CL GRADE 3	41	3	GRADE 3	70	1	
76	21.01.16	KAMINI	37	F	1629701	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	53	155	22.06	MPC I	NEUTRAL	CL GRADE2	27	1	GRADE 1	85	1	
77	21.01.16	SRIDHARAN	30	M	1540097	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	1	
78	21.01.16	PUSHPA	24	F	1544890	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
79	22.01.16	AMUDHA	35	F	1634276	TVL	RT CSOM	RT MOD RADICAL MASTOIDECTOMY	56	161	21.6	MPC II	NEUTRAL	CL GRADE 1	36	0	GRADE 1	85	1	
80	22.01.16	NAGAMMAL	60	F	1557232	ML	DNS	SEPTOPLASTY	60	158	24.03	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
81	22.01.16	RAMANI	30	F	1566478	KVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
82	22.01.16	SRIDHARAN	30	M	1540097	TVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
83	22.01.16	PUSHPA	24	F	1544890	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	85	1	
84	23.01.16	JAGAN	35	M	1564807	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	22	1	GRADE 1	85	1	
85	23.01.16	RAMANI	22	F	1566478	TVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
86	23.01.16	THAHIMA	46	F	1511098	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	19	0	GRADE 1	90	1	
87	23.01.16	ANNAMAL	35	F	1576390	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	80	1	
88	25.01.16	THAHIMA	35	F	1511098	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPCII	NEUTRAL	CL GRADE 2	19	1	GRADE 1	80	1	
89	25.01.16	VIMALA	31	M	1556328	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	60	168	21.26	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	85	1	
90	25.01.16	POOJA	18	F	1563209	ML	DNS	SEPTOPLASTY	46	155	19.15	MPC I	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
91	25.01.16	VISHNU	18	M	1629701	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	66	168	23.38	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	85	1	
92	25.01.16	SUMITHA	18	F	1533865	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
93	27.01.16	RAJU	50	M	1644629	TVL	L2-L3 #	POSTERIOR STABILISATION	58	165	21.3	MPC II	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
94	27.01.16	LOKESHWARAN	32	M	1620915	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	67	165	24.61	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	90	1	
95	27.01.16	SURABHI	19	F	1562892	ML	DNS	FESS	50	156	20.55	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	90	1	
96	27.01.16	LAKSHMI	18	F	1544374	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	57	156	20.94	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
97	27.01.16	VENKATESAN	21	M	1567182	ML	SINONASAL POLYPOS	POLYPECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	21	1	GRADE 1	90	1	
98	28.01.16	ANITHA	36	F	1508234	TVL	DNS	SEPTOPLASTY	56	160	21.88	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
99	28.01.16	RAJESHWARI	42	F	1542091	TVL	LT CSOM	MOD. RADICAL MASTOIDECTOMY	55	157	22.31	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	95	1	
100	28.01.16	GEETHA	18	F	1570023	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	50	160	19.53	MPC I	NEUTRAL	CL GRADE 1	22	0	GRADE 1	90	1	
101	28.01.16	BHAGATH	27	M	1577634	KVL	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	165	22.04	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
102	29.01.16	RAJAN	19	M	1568027	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	45	155	18.73	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	90	1	
103	29.01.16	RAMESH	24	M	1642784	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	165	22.77	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	90	1	
104	29.01.16	SAKTHIVEL	25	M	1588907	KVL	SEROMA EAR	WINDOW PROCEDURE	65	160	23.44	MPC II	NEUTRAL	CL GRADE2	21	1	GRADE 1	80	1	
105	29.01.16	SIVAGAMI	40	F	1560092	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	85	1	
106	29.01.16	USHARANI	35	F	1603642	TVL	DNS	FESS	53	156	21.79	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	85	1	
107	30.01.16	CHANDRU	50	M	1544786	KVL	L5 FRACTURE	POSTERIOR STABILISATION	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
108	30.01.16	KAILASH	27	M	1564902	ML	DNS	SEPTOPLASTY	65	165	23.88	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
109	30.01.16	ROSY	16	F	1572214	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	50	160	19.53	MPC I	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
110	30.01.16	ANITHA	29	F	1540965	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	67	172	22.65	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 2	80	1	
111	30.01.16	KUMARESAN	40	M	1635109	TVL	CHRONIC SINUSITIS	FESS	61	166	22.14	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 1	80	1	
112	01.06.16	GEETHA	55	F	1635462	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	60	157	24.34	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	85	1	
113	01.06.16	SUJATHA	35	F	1511267	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	60	156	24.65	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 2	80	1	
114	01.06.16	GANESAN	48	M	1641086	TVL	L4-L5 HNP	LAMINECTOMY	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	28	1	GRADE 1	80	1	
115	01.06.16	SUNDARI	23	F	1566302	ML	CHRONIC SINUSITIS	FESS	55	158	22.03	MPC I	NEUTRAL	CL GRADE 2	21	1	GRADE 1	90	1	
116	01.06.16	BHAVANI	38	F	1568327	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	48	155	19.98	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
117	02.06.16	RASIKA	20	F	1562231	ML	DNS	SEPTOPLASTY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	19	1	GRADE 1	85	1	
118	02.06.16	ANANDHI	24	F	1540083	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE1	19	0	GRADE 1	90	1	
119	02.06.16	LAKSHMI	42	F	1641148	TVL	RT CSOM	CORTICAL MASTOIDECTOMY	52	157	21.1	MPC I	NEUTRAL	CL GRADE 1	35	0	GRADE 1	90	1	
120	02.06.16	RAJASEKAR	35	M	1640073	TVL	DNS	SEPTOPLASTY	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
121	02.06.16	RANI	16	F	1543569	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	50	156	20.55	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
122	03.06.16	VINOD	16	M	1562001	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDEC	50	155	20.81	MPC II	NEUTRAL	CL GRADE 1	27	1	GRADE 1	80	1	
123	03.06.16	SIVAGAMI	38	F	1561108	KVL	DNS	SEPTOPLASTY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	33	2	GRADE 2	80	1	

S.NO	DATE OF SURGERY	NAME	AGE	SEX	IP NUMBER	GROUP	DIAGNOSIS	PROCEDURE	WEIGHT	HEIGHT	BMI	MALLAMPATI SCORE	HEAD POSITION	LARYNOGOSCOPY VIEW	TTI(secs)	INTUBATION DIFFICULTY SCORE	EASE OF INTUBATION	POGO SCORE	NUMBER OF ATTEMPTS	
1	02.01.16	VENKATARAMAN	25	M	1540986	ML	DNS	FESS	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	41	2	GRADE 2	70	1	
2	02.01.16	RAMALINGAM	25	M	1534675	ML	DNS	FESS	57	159	22.55	MPC I	NEUTRAL	CL GRADE 1	15	0	GRADE 1	80	1	
3	02.01.16	VAISHNAVI	24	F	1639874	TVL	FIBROADENOMA	EXCISION	55	160	21.48	MPC I	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
4	02.01.16	ANANDHI	33	F	1542098	KVL	ACUTE APPENDICITIS	LAP APPENDICECTOMY	51	158	20.43	MPC I	NEUTRAL	CL GRADE 1	45	0	GRADE 1	90%		
5	02.01.16	RAJENDRAN	50	M	1564328	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	60	167	21.51	MPC I	NEUTRAL	CL GRADE 1	38	0	GRADE 1	85	1	
6	02.01.16	SRIDHAR	29	M	1567543	ML	CSOM	TYMPANOPLASTY	80	180	24.69	MPC I	NEUTRAL	CL GRADE 2	17	1	GRADE 2	80	1	
7	04.01.16	ELUMALAI	40	M	1640500	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	60	163	22.58	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
8	04.01.16	RESHMA	31	F	1546798	KVL	RT CSOM	RT TYMPANOPLASTY	63	162	24.01	MPCII	NEUTRAL	CL GRADE 2	33	0	GRADE 1	80	1	
9	04.01.16	NADHIYA	26	F	1642367	TVL	LIPOMA	EXCISION	55	163	20.7	MPC II	NEUTRAL	CL GRADE 2	28	1	GRADE 1	85	1	
10	04.01.16	SHEIK MOHD	38	M	1638761	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	49	158	19.62	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
11	04.01.16	SARAVANAN	32	M	1527865	KVL	DNS	FESS	73	173	23.39	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
12	05.01.16	MALLIGA	18	F	1543652	ML	SINONASAL POLYPOS	FESS	58	167	20.8	MPC II	NEUTRAL	CLGRADE 2	20	1	GRADE 2	80	1	
13	05.01.16	SUSEELA	57	F	1576432	KVL	ABDOMINAL PAIN	D LAP AND PROCEES	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
14	05.01.16	KALAISEVI	26	F	1640703	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	56	157	22.71	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
15	05.01.16	RASIKA	20	F	1532456	ML	RT CSOM	RT TYMPANOPLASTY	55	155	22.89	MPC I	NEUTRAL	CLGRADE 1	25	0	GRADE 1	85	1	
16	05.01.16	DEEPA	28	F	1564378	KVL	DNS	SEPTOPLASTY	52	160	20.31	MPC I	NEUTRAL	CL GRADE 1	31	0	GRADE 1	90	1	
17	06.01.16	AMUDHA	31	F	1543908	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	60	156	24.65	MPC I	NEUTRAL	CL GRADE 1	15	0	GRADE 1	90	1	
18	06.01.16	NIRMALA	32	F	1533245	ML	RT CSOM	RT TYMPANOPLASTY	50	154	21.08	MPC II	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
19	06.01.16	THIRUPATHI	18	M	1640852	TVL	ABDOMINAL PAIN	LAP APPENDICECTOMY	65	170	22.49	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
20	06.01.16	DIVYA	25	F	1565213	ML	DNS	SEPTOPLASTY	54	160	21.09	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	80	1	
21	07.01.16	KATHIRAVEL	44	M	1547854	ML	CHRONIC SINUSITIS	FESS	62	165	22.77	MPC I	NEUTRAL	CL GRADE 1	38	0	GRADE 1	90	1	
22	07.01.16	NAGAMMA	38	F	1640004	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	54	158	21.63	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 2	80	1	
23	07.01.16	MUNUSAMY	45	M	1642064	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	60	160	23.48	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
24	07.01.16	MARIMUTHU	18	M	1531142	ML	ACUTE APPENDICITIS	LAP APPENDICECTOMY	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
25	07.01.16	ANNAMAKKA	40	F	1564387	KVL	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	59	162	22.48	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	90	1	
26	08.01.16	NAGARAJ	46	M	1641197	TVL	DNS	SEPTOPLASTY	63	172	21.3	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
27	08.01.16	SELVI	40	F	1546785	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	85	1	
28	08.01.16	DEVI	25	F	1539087	ML	ACUTE APPENDICITIS	LAP APPENDICECTOMY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	80	1	
29	08.01.16	VEERARAJ	29	M	1567438	KVL	CHRONIC SINUSITIS	FESS	64	166	23.33	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
30	09.01.16	DEEPALAKSHMI	38	F	1577643	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	159	24.52	MPC II	NEUTRAL	CL GRADE 2	45	4	GRADE 4	70	2	
31	09.01.16	MOHD ARIF	18	M	1642082	TVL	CHRONIC TONSILITIS	TONSILLECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	2	
32	09.01.16	MAHIMA	40	F	1544326	KVL	CHRONIC SINUSITIS	FESS	56	166	20.32	MPC I	NEUTRAL	CL GRADE 1	36	0	GRADE 1	80	1	
33	11.01.16	DIVYA	35	F	1568954	ML	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	50	154	21.08	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
34	11.01.16	ROSY	25	F	1547865	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	157	20.28	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
35	11.01.16	VIMALA	36	F	1534276	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	55	156	22.6	MPC II	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
36	11.01.16	MADHU	38	F	1640809	TVL	SNG THYROID	HEMITHYROIDECTOMY	57	158	22.83	MPC II	NEUTRAL	CL GRADE 1	24	0	GRADE 1	90	1	
37	11.01.16	VAISHNAVI	25	F	1547861	KVL	FIBROADENOMA	EXCISION BIOPSY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	30	0	GRADE 1	85	1	
38	12.01.16	SETHUPATHI	21	M	1577864	KVL	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	67	165	24.61	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	90	1	
39	12.01.16	GUNASEKARAN	18	M	1642113	TVL	APPENDICULAR ABCE	APPENDICECTOMY	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
40	12.01.16	GEETHA	33	F	1564890	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	85	1	
41	12.01.16	MANIKANADAN	25	M	1544098	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	57	156	20.94	MPC I	NEUTRAL	CL GRADE 1	22	0	GRADE 1	80	1	
42	12.01.16	SUMATHI	50	F	1544760	KVL	DNS	FESS	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
43	13.01.16	GANESAN	36	M	1543765	ML	D8 FRACTURE	POSTERIOR STABILISATION	67	170	23.18	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
44	13.01.16	NATARJAN	60	M	1641427	TVL	RT CSOM	MOD. RADICAL MASTOIDECTOMY	66	170	22.84	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	85	1	
45	13.01.16	VASUGI	31	F	1642352	TVL	FIBROADENOMA	EXCISION	57	156	23.42	MPC1	NEUTRAL	CL GRADE1	24	0	GRADE 1	90	1	
46	13.01.16	PREMANATHAN	17	M	1601324	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	63	168	22.32	MPC I	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
47	14.01.16	SARAVANAN	35	M	1548750	KVL	RT CSOM	RT TYMPANOPLASTY	76	175	24.82	MPC II	NEUTRAL	CL GRADE 2	41	0	GRADE 1	90	1	
48	14.01.16	VIJAYA	48	F	1577645	KVL	MRM WOUND GAPIN	WOUND RESUTURING	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	50	4	GRADE 4	80	2	
49	14.01.16	JOTHI	30	F	1590876	ML	DNS	FESS	56	160	21.88	MPC I	NEUTRAL	CL GRADE 1	37	0	GRADE 1	85	1	
50	14.01.16	VASANTHI	39	F	1638325	TVL	ABDOMINAL PAIN	D LAP AND PROCEED	60	158	24.03	MPC I	NEUTRAL	CL GRADE 2	31	1	GRADE 1	85	1	
51	14.01.16	AMUDHAN	19	M	1558765	KVL	DNS	SEPTOPLASTY	62	166	22.5	MPC I	NEUTRAL	CL GRADE 1	16	0	GRADE 1	90	1	
52	14.01.16	RAMU	22	M	1600987	ML	DNS	SEPTOPLASTY	60	164	22.31	MPC I	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
53	16.01.16	VINEETHA	37	F	1589765	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
54	16.01.16	MUHTU	35	M	1566098	KVL	D7-D8 FRACTURE	D7-D8 DISCECTOMY	67	172	22.65	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
55	16.01.16	GNANASUNDARI	26	F	1642097	TVL	MNG THROID	TOTAL THYROIDECTOMY	52	156	21.37	MPC II	NEUTRAL	CL GRADE2	30	1	GRADE 1	90	1	
56	16.01.16	VENKATACHALAM	40	M	1630128	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	60	167	21.51	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	90	1	
57	16.01.16	VISHNU	19	M	1578456	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	59	162	22.48	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
58	18.01.16	PREMKUMAR	22	M	1582108	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	57	165	20.94	MPC I	NEUTRAL	CL GRADE 2	32	2	GRADE 2	80	1	
59	18.01.16	MARIAPPAN	60	M	1562891	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	65	168	23.03	MPC I	NEUTRAL	CL GRADE 2	25	1	GRADE 1	80	1	
60	18.01.16	SUMATHI	40	F	1643547	TVL	DNS	SEPTOPLASTY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	85	1	

61	18.01.16	RAMALINGAM	50	M	1572380	ML	CHRONIC SINUSITIS	FESS	60	163	22.58	MPC II	NEUTRAL	CL GRADE 2	30	2	GRADE 2	80	1	
62	18.01.16	RAVI	50	M	1544865	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	64	166	23.33	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
63	18.01.16	MOHINI	45	F	1566098	KVL	ABD PAIN FOR EVALU	D LAP AND PROCEED	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE1	95	1	
64	19.01.16	DEEPA	27	F	1567322	ML	DNS	SEPTOPLASTY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
65	19.01.16	KARTHIK	16	M	1555689	KVL	DNS	SEPTOPLASTY	67	165	24.61	MPC II	NEUTRAL	CL GRADE 2	40	1	GRADE 2	80	1	
66	19.01.16	ASHOK	24	M	1600764	TVL	CHRONIC SINUSITIS	FESS	60	165	22.04	MPC II	NEUTRAL	CL GRADE2	26	1	GRADE 1	90	1	
67	19.01.16	PUSHPALATHA	40	F	1641108	TVL	LT CSOM	MYRINGOPLASTY	57	160	22.27	MPC II	NEUTRAL	CL GRADE 2	45	3	GRADE 4	70	2	
68	19.01.16	MAHESWARI	48	F	1572302	ML	DNS	SEPTOPLASTY	45	150	20	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
69	20.01.16	KUPPUSAMY	45	M	1544378	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	51	158	20.43	MPC I	NEUTRAL	CL GRADE 2	30	1	GRADE 1	90	1	
70	20.01.16	SAROJA	57	F	1560012	ML	RT CSOM	RT TYMPANOPLASTY	60	161	23.15	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
71	20.01.16	RAJU	19	M	1564290	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	64	166	23.33	MPC II	NEUTRAL	CL GRADE 2	29	`1	GRADE1	85	1	
72	20.01.16	KALAIARASI	35	F	1563498	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	55	158	22.03	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
73	20.01.16	LALITHA	47	F	1564223	ML	CHRONIC SINUSITIS	FESS	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	28	1	GRADE 1	80	1	
74	21.01.16	VARADHARAJAN	52	M	1644210	TVL	SNG THYROID	HEMITHYROIDECTOMY	67	165	24.61	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	90	1	
75	21.01.16	GIRIDHARAN	17	M	1562781	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	60	170	20.76	MPC II	NEUTRAL	CL GRADE 3	41	3	GRADE 3	70	1	
76	21.01.16	KAMINI	37	F	1629701	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	53	155	22.06	MPC I	NEUTRAL	CL GRADE2	27	1	GRADE 1	85	1	
77	21.01.16	SRIDHARAN	30	M	1540097	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	1	
78	21.01.16	PUSHPA	24	F	1544890	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
79	22.01.16	AMUDHA	35	F	1634276	TVL	RT CSOM	RT MOD RADICAL MASTOIDECTOMY	56	161	21.6	MPC II	NEUTRAL	CL GRADE 1	36	0	GRADE 1	85	1	
80	22.01.16	NAGAMMAL	60	F	1557232	ML	DNS	SEPTOPLASTY	60	158	24.03	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
81	22.01.16	RAMANI	30	F	1566478	KVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
82	22.01.16	SRIDHARAN	30	M	1540097	TVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
83	22.01.16	PUSHPA	24	F	1544890	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	85	1	
84	23.01.16	JAGAN	35	M	1564807	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	22	1	GRADE 1	85	1	
85	23.01.16	RAMANI	22	F	1566478	TVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
86	23.01.16	THAHIMA	46	F	1511098	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	19	0	GRADE 1	90	1	
87	23.01.16	ANNAMAL	35	F	1576390	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	80	1	
88	25.01.16	THAHIMA	35	F	1511098	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPCII	NEUTRAL	CL GRADE 2	19	1	GRADE 1	80	1	
89	25.01.16	VIMALA	31	M	1556328	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	60	168	21.26	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	85	1	
90	25.01.16	POOJA	18	F	1563209	ML	DNS	SEPTOPLASTY	46	155	19.15	MPC I	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
91	25.01.16	VISHNU	18	M	1629701	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	66	168	23.38	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	85	1	
92	25.01.16	SUMITHA	18	F	1533865	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
93	27.01.16	RAJU	50	M	1644629	TVL	L2-L3 #	POSTERIOR STABILISATION	58	165	21.3	MPC II	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
94	27.01.16	LOKESHWARAN	32	M	1620915	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	67	165	24.61	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	90	1	
95	27.01.16	SURABHI	19	F	1562892	ML	DNS	FESS	50	156	20.55	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	90	1	
96	27.01.16	LAKSHMI	18	F	1544374	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	57	156	20.94	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
97	27.01.16	VENKATESAN	21	M	1567182	ML	SINONASAL POLYPOS	POLYPECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	21	1	GRADE 1	90	1	
98	28.01.16	ANITHA	36	F	1508234	TVL	DNS	SEPTOPLASTY	56	160	21.88	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
99	28.01.16	RAJESHWARI	42	F	1542091	TVL	LT CSOM	MOD. RADICAL MASTOIDECTOMY	55	157	22.31	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	95	1	
100	28.01.16	GEETHA	18	F	1570023	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	50	160	19.53	MPC I	NEUTRAL	CL GRADE 1	22	0	GRADE 1	90	1	
101	28.01.16	BHAGATH	27	M	1577634	KVL	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	165	22.04	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
102	29.01.16	RAJAN	19	M	1568027	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	45	155	18.73	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	90	1	
103	29.01.16	RAMESH	24	M	1642784	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	165	22.77	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	90	1	
104	29.01.16	SAKTHIVEL	25	M	1588907	KVL	SEROMA EAR	WINDOW PROCEDURE	65	160	23.44	MPC II	NEUTRAL	CL GRADE2	21	1	GRADE 1	80	1	
105	29.01.16	SIVAGAMI	40	F	1560092	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	85	1	
106	29.01.16	USHARANI	35	F	1603642	TVL	DNS	FESS	53	156	21.79	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	85	1	
107	30.01.16	CHANDRU	50	M	1544786	KVL	L5 FRACTURE	POSTERIOR STABILISATION	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
108	30.01.16	KAILASH	27	M	1564902	ML	DNS	SEPTOPLASTY	65	165	23.88	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
109	30.01.16	ROSY	16	F	1572214	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	50	160	19.53	MPC I	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
110	30.01.16	ANITHA	29	F	1540965	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	67	172	22.65	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 2	80	1	
111	30.01.16	KUMARESAN	40	M	1635109	TVL	CHRONIC SINUSITIS	FESS	61	166	22.14	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 1	80	1	
112	01.06.16	GEETHA	55	F	1635462	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	60	157	24.34	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	85	1	
113	01.06.16	SUJATHA	35	F	1511267	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	60	156	24.65	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 2	80	1	
114	01.06.16	GANESAN	48	M	1641086	TVL	L4-L5 HNP	LAMINECTOMY	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	28	1	GRADE 1	80	1	
115	01.06.16	SUNDARI	23	F	1566302	ML	CHRONIC SINUSITIS	FESS	55	158	22.03	MPC I	NEUTRAL	CL GRADE 2	21	1	GRADE 1	90	1	
116	01.06.16	BHAVANI	38	F	1568327	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	48	155	19.98	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
117	02.06.16	RASIKA	20	F	1562231	ML	DNS	SEPTOPLASTY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	19	1	GRADE 1	85	1	
118	02.06.16	ANANDHI	24	F	1540083	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE1	19	0	GRADE 1	90	1	
119	02.06.16	LAKSHMI	42	F	1641148	TVL	RT CSOM	CORTICAL MASTOIDECTOMY	52	157	21.1	MPC I	NEUTRAL	CL GRADE 1	35	0	GRADE 1	90	1	
120	02.06.16	RAJASEKAR	35	M	1640073	TVL	DNS	SEPTOPLASTY	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
121	02.06.16	RANI	16	F	1543569	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	50	156	20.55	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
122	03.06.16	VINOD	16	M	1562001	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDEC	50	155	20.81	MPC II	NEUTRAL	CL GRADE 1	27	1	GRADE 1	80	1	
123	03.06.16	SIVAGAMI	38	F	1561108	KVL	DNS	SEPTOPLASTY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	33	2	GRADE 2	80	1	

124	03.06.16	PUSHPALATHA	34	F	1500873	KVL	RT CSOM	TYMPANOPLASTY	46	155	19.15	MPC II	NEUTRAL	CL GRADE 2	30	2	GRADE 2	80	1	
125	03.06.16	NANDHINI	20	F	1644671	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	54	158	21.63	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	90	1	
126	04.06.16	GOKUL	19	M	1511437	KVL	DNS	FESS	60	164	22.31	MPC I	NEUTRAL	CL GRADE 2	33	1	GRADE 1	85	1	
127	04.06.16	RANI	25	F	1580328	ML	RT CSOM	RT TYMPANOPLASTY	58	155	24.14	MPC I	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
128	04.06.16	RAJESH	16	M	1572210	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	60	164	22.31	MPC I	NEUTRAL	CL GRADE 2	27	1	GRADE 1	90	1	
129	04.06.16	BASKARAN	40	M	1642058	TVL	LT CSOM	MOD. RADICAL MASTOIDECTOMY	57	165	20.94	MPC I	NEUTRAL	CL GRADE 1	35	0	GRADE 1	90	1	
130	06.06.16	VINOTHINI	17	F	1569821	ML	DNS	SEPTOPLASTY	60	155	24.97	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 1	80	1	
131	06.06.16	LOGESWARI	37	F	1642210	TVL	MNG THROID	TOTAL THYROIDECTOMY	52	157	21.1	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
132	06.06.16	LAKSHMI SHREE	31	F	1556626	KVL	DNS	SEPTOPLASTY	48	152	20.78	MPC II	NEUTRAL	CL GRADE 2	31	2	GRADE 2	85	1	
133	06.06.16	LATHA	24	F	1555208	KVL	LT CSOM	CORTICAL MASTOIDEDCTOMY	52	156	21.37	MPC II	NEUTRAL	CL GRADE 1	25	0	GRADE 1	90	1	
134	06.06.16	MAHESWARAN	40	M	1569456	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	170	22.49	MPC I	NEUTRAL	CL GRADE 1	17	0	GRADE 1	95	1	
135	07.06.16	SAMUEL	29	M	1642007	TVL	CHRONIC SINUSITIS	FESS	58	164	21.56	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
136	07.06.16	CHANDRU	45	M	1643828	TVL	LIPOMA BACK	EXCISION	63	170	21.8	MPC I	NEUTRAL	CL GRADE 1	34	0	GRADE 1	90	1	
137	07.06.16	RAJESH	25	M	1576420	KVL	LT CSOM	MODIFIED RADICAL MASTOIDECTOM	51	158	20.43	MPC II	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
138	07.06.16	DARSHAN	27	M	1570042	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDECT	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	21	1	GRADE 1	80	1	
139	08.06.16	VENKATACHALAM	40	M	1630128	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	60	167	21.51	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	90	1	
140	08.06.16	MANIKANDAN	17	M	1571249	ML	CHRONIC SINUSITIS	FESS	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	25	1	GRADE 1	85	1	
141	08.06.16	SUMATHI	40	F	1643547	TVL	DNS	SEPTOPLASTY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	85	1	
142	08.06.16	ASHOK	24	M	1600764	TVL	CHRONIC SINUSITIS	FESS	60	165	22.04	MPC II	NEUTRAL	CL GRADE2	26	1	GRADE 1	90	1	
143	08.06.16	DIVYA	27	F	1550234	KVL	CHRONIC SINUSITIS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	28	2	GRADE 2	80	1	
144	09.06.16	PUSHPALATHA	40	F	1641108	TVL	LT CSOM	MYRINGOPLASTY	57	160	22.27	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
145	09.06.16	GIRIJA	46	F	1571553	ML	DNS	SEPTOPLASTY	53	156	21.78	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
146	09.06.16	VELUMANY	38	M	1574231	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	170	20.76	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 1	80	1	
147	09.06.16	VARADHARAJAN	52	M	1644210	TVL	SNG THYROID	HEMITHYROIDECTOMY	67	165	24.61	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	90	1	
148	10.06.16	SASIREKHA	47	F	1566328	KVL	RT CSOM	CORTICAL MASTOIDEDCTOMY	45	151	19.74	MPC II	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	1	
149	10.06.16	VIGNESH	19	M	1547882	KVL	NASAL BONE #	NASAL BONE REDUCTION	67	172	22.65	MPC II	NEUTRAL	CL GRADE 1	35	2	GRADE 2	80	1	
150	10.06.16	KANCHANA	36	F	1663182	TVL	CHRONIC SINUSITIS	FESS	58	162	22.1	MPC II	NEUTRAL	CL GRADE 1	29	0	GRADE 1	95	1	
151	10.06.16	DEVI	23	F	1551820	KVL	DNS	SEPTOPLASTY	60	156	24.65	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
152	10.06.16	KUPPUSAMY	50	M	1568549	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	165	23.88	MPC II	NEUTRAL	CL GRADE 2	20	1	GRADE 1	80	1	
153	11.06.16	SAMUEL	59	M	1576340	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	60	158	24.03	MPC I	NEUTRAL	CL GRADE 1	16	0	GRADE 1	85	1	
154	11.06.16	PUNITHA	40	F	1642183	TVL	ABDOMINAL PAIN	D LAP AND PROCEED	53	155	22.06	MPC I	NEUTRAL	CL GRADE 2	37	1	GRADE 1	80	1	
155	11.06.16	GAYATHRI	35	F	1569842	ML	DNS	SEPTOPLASTY	53	157	21.5	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	90	1	
156	11.06.16	ANITHA	36	F	1508234	TVL	DNS	SEPTOPLASTY	56	160	21.88	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
157	13.06.16	RAJESHWARI	42	F	1542091	TVL	LT CSOM	MOD. RADICAL MASTOIDECTOMY	55	157	22.31	MPC I	NEUTRAL	CL GRADE 1	28	0	GRADE 1	95	1	
158	13.06.16	SRIDHARAN	20	M	1577235	KVL	CHRONIC SINUSITIS	FESS	61	163	22.96	MPC II	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
159	13.06.16	RAMESH	24	M	1642784	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	165	22.77	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	90	1	
160	13.06.16	KARUNAKARAN	35	M	1570648	ML	CHRONIC SINUSITIS	FESS	60	162	22.86	MPC I	NEUTRAL	CL GRADE 2	17	1	GRADE 1	90	1	
161	13.06.16	ROHINI	25	F	1571185	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	55	158	22.03	MPC I	NEUTRAL	CL GRADE 1	22	1	GRADE 1	90	1	
162	14.06.16	KALAIARASI	45	F	1577236	KVL	LT CSOM	MODIFIED RADICAL MASTOIDECTOM	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
163	14.06.16	MAHESHWARAN	18	M	1552976	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	30	0	GRADE 1	90	1	
164	14.06.16	GOPAL	35	M	1642730	TVL	DNS	SEPTOPLASTY	57	162	21.72	MPC II	NEUTRAL	CL GRADE 1	22	0	GRADE 1	85	1	
165	14.06.16	KATHIRAVAN	33	M	1554721	KVL	LT CSOM	CORTICAL MASTOIDEDCTOMY	55	158	22.03	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
166	14.06.16	SENTHIL	33	M	1572003	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	54	160	21.09	MPC II	NEUTRAL	CL GRADE 2	20	1	GRADE 1	85	1	
167	15.06.16	SARANYA	18	F	1563910	KVL	DNS	SEPTOPLASTY	46	155	19.15	MPC I	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	1	
168	15.06.16	MANI	18	M	1637291	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	60	168	21.26	MPC I	NEUTRAL	CL GRADE1	28	0	GRADE 1	90	1	
169	15.06.16	SHRUTHI	28	F	1624530	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	53	157	21.5	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
170	15.06.16	BANUMATHI	60	F	1582021	ML	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
171	16.06.16	THIRUPATHI	18	M	1640852	TVL	ABDOMINAL PAIN	LAP APPENDICECTOMY	65	170	22.49	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
172	16.06.16	JANAKI	18	F	1573225	ML	RT CSOM	TYMPANOPLASTY	50	155	20.81	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
173	16.06.16	KARTHIK	19	M	1571920	ML	CHRONIC SINUSITIS	FESS	55	165	20.2	MPC I	NEUTRAL	CL GRADE 2	15	1	GRADE 1	80	1	
174	16.06.16	SETHURAMAN	40	M	1553802	KVL	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	165	22.04	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	90	1	
175	17.06.16	RAVICHANDRAN	25	M	1573154	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDEC	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	22	1	GRADE 1	80	1	
176	17.06.16	NAGAMMA	55	F	1640004	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	54	158	21.63	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 2	80	1	
177	17.06.16	MUNUSAMY	52	M	1642064	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	85	1	
178	17.06.16	SELVI	29	F	1562871	KVL	CHOLELITHIASIS	LAPRASCOPIC CHOLECYSTECTOMY	49	158	19.63	MPC II	NEUTRAL	CL GRADE 1	30	1	GRADE 2	85	1	
179	17.06.16	SREELAKSHMI	22	F	1572197	ML	DNS	SEPTOPLASTY	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	95	1	
180	18.06.16	SRINIVASAN	60	M	1574391	ML	VOCAL POLYP	MLE BIOPSY	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	14	0	GRADE 1	90	1	
181	18.06.16	NAGARAJ	29	M	1641197	TVL	DNS	SEPTOPLASTY	63	172	21.3	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
182	20.06.16	RAJINI	50	M	1568329	KVL	DNS	FESS	62	159	24.52	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
183	20.06.16	SAROJINI	16	F	1572908	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	47	159	18.59	MPC II	NEUTRAL	CL GRADE2	38	2	GRADE 2	80	1	
184	20.06.16	AMUDHA	24	F	1570043	KVL	RT CSOM	CORTICAL MASTOIDEDCTOMY	56	154	23.61	MPC II	NEUTRAL	CL GRADE 2	31	2	GRADE 2	80	1	
185	20.06.16	AKILA	24	F	1644289	TVL	APPENDICULAR ABCE	APPENDICECTOMY	54	158	21.63	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	85	1	
186	20.06.16	DIVYA	35	F	1568954	ML	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	50	154	21.08	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	

187	21.06.16	LOGANATHAN	40	M	1640742	TVL	L4-L5 HNP	LAMINECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 1	24	0	GRADE 1	90	1	
188	21.06.16	NISHA	18	F	1643802	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	53	158	21.23	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
189	21.06.16	SUNDARI	35	F	1642845	TVL	RT CSOM	MOD. RADICAL MASTOIDECTOMY	58	160	22.66	MPC II	NEUTRAL	CL GRADE 1	27	0	GRADE 1	85	1	
190	21.06.16	RAMAN	50	M	1557302	KVL	RT CSOM	MODIFIED RADICAL MASTOIDECTOM	60	164	22.31	MPC II	NEUTRAL	CL GRADE 1	22	0	GRADE 1	90	1	
191	22.06.16	ROSY	25	F	1547865	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	157	20.28	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
192	22.06.16	SHOBA	28	F	1577342	KVL	DNS	SEPTOPLASTY	45	151	19.74	MPC II	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
193	22.06.16	VIMALA	36	F	1534276	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	55	156	22.6	MPC I	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
194	22.06.16	KALAIARASI	27	F	1642193	TVL	CHRONIC SINUSITIS	FESS	56	158	22.43	MPC I	NEUTRAL	CL GRADE 1	23	0	GRADE 1	90	1	
195	22.06.16	VIJAY	20	M	1643826	TVL	DNS	SEPTOPLASTY	62	165	22.77	MPC II	NEUTRAL	CL GRADE 1	32	1	GRADE 1	85	1	
196	23.06.16	SUSEELA	57	F	1569124	KVL	LT CSOM	TYMPANOPLASTY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	31	2	GRADE 2	85	1	
197	23.06.16	UDHAYAKUMAR	50	M	1647204	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	60	170	20.76	MPC II	NEUTRAL	CL GRADE 2	25	1	GRADE 1	90	1	
198	23.06.16	RAJESHWARI	25	F	1537414	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	50	156	20.55	MPC II	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
199	23.06.16	DEEPA	20	F	1546720	KVL	RT CSOM	CORTICAL MASTOIDEDCTOMY	48	152	20.78	MPC II	NEUTRAL	CL GRADE 2	32	2	GRADE 2	85	1	
200	23.06.16	GEETHA	33	F	1564890	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	85	1	
201	24.06.16	SRIDHARAN	30	M	1540097	TVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
202	24.06.16	VEERAMANI	28	M	1563296	KVL	DNS	SEPTOPLASTY	73	173	23.39	MPC II	NEUTRAL	CL GRADE 2	34	1	GRADE 1	80	1	
203	24.06.16	PUSHPA	24	F	1544890	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	85	1	
204	24.06.16	GANESAN	36	M	1543765	ML	D8 FRACTURE	POSTERIOR STABILISATION	67	170	23.18	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
205	25.06.16	PREMANATHAN	17	M	1601324	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	63	168	22.32	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
206	25.06.16	JOTHI	30	F	1590876	ML	DNS	FESS	56	160	21.88	MPC I	NEUTRAL	CL GRADE 1	37	0	GRADE 1	85	1	
207	25.06.16	RAMANI	30	F	1566478	TVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
208	25.06.16	SUDARSAN	30	M	1560078	KVL	CHRONIC SINUSITIS	FESS	60	156	24.65	MPC II	NEUTRAL	CL GRADE 2	25	1	GRADE 1	80	1	
209	27.06.16	HARSHAVARDHAN	18	M	1564892	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	47	154	19.82	MPC II	NEUTRAL	CL GRADE 1	30	0	GRADE 1	85	1	
210	27.06.16	RAMU	22	M	1600987	ML	DNS	SEPTOPLASTY	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
211	27.06.16	VINEETHA	37	F	1589765	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	47	155	19.56	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 1	90	1	
212	27.06.16	PREMKUMAR	32	M	1547298	KVL	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	61	163	22.96	MPC I	NEUTRAL	CL GRADE 2	45	3	GRADE 2	80	2	
213	28.06.16	THAHIMA	46	F	1511098	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	19	1	GRADE 1	80	1	
214	28.06.16	RAJA	47	M	1571108	KVL	DNS	SEPTOPLASTY	67	172	22.65	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
215	28.06.16	GANESAN	40	M	1569734	KVL	RT CSOM	RT TYMPANOPLASTY	60	165	22.04	MPC I	NEUTRAL	CL GRADE 1	36	0	GRADE 1	80	1	
216	28.06.16	VISHNU	18	M	1629701	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	66	168	23.38	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	85	1	
217	28.06.16	PREMKUMAR	22	M	1582108	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	57	165	20.94	MPC II	NEUTRAL	CL GRADE 2	32	2	GRADE 2	80	1	
218	29.06.16	RAJU	50	M	1644629	TVL	L2-L3 #	POSTERIOR STABILISATION	58	165	21.3	MPC II	NEUTRAL	CL GRADE 2	50	4	GRADE 4	70	2	
219	29.06.16	DANUSH	16	M	1572814	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	31	0	GRADE 1	90	1	
220	29.06.16	LOKESHWARAN	32	M	1620915	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	67	165	24.61	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	90	1	
221	29.06.16	ANANDHI	48	F	1632845	TVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	34	1	GRADE 1	80	1	
222	29.06.16	MARIAPPAN	60	M	1562891	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	65	168	23.03	MPC I	NEUTRAL	CL GRADE 2	25	1	GRADE 1	80	1	
223	30.06.16	GAYATHRI	33	F	1537810	KVL	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	49	158	19.63	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
224	30.06.16	SHASHATHA	55	F	1641742	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	63	158	25.24	MPC II	NEUTRAL	CL GRADE 2	36	1	GRADE 1	80	1	
225	30.06.16	RAMALINGAM	50	M	1572380	ML	CHRONIC SINUSITIS	FESS	60	163	22.58	MPC I	NEUTRAL	CL GRADE 2	30	2	GRADE 2	80	1	
226	30.07.16	DEEPA	27	F	1567322	ML	DNS	SEPTOPLASTY	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
227	01.07.16	RAJU	19	M	1564290	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	64	166	23.33	MPC II	NEUTRAL	CL GRADE 2	29	`1	GRADE1	85	1	
228	01.07.16	YUVARANI	32	F	1634762	TVL	RT CSOM	MOD. RADICAL MASTOIDECTOMY	58	162	22.1	MPC I	NEUTRAL	CL GRADE 2	29	1	GRADE 1	85	1	
229	02.07.16	SRIDHARAN	30	M	1540097	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	73	173	23.39	MPC I	NEUTRAL	CL GRADE 2	35	2	GRADE 2	80	1	
230	02.07.16	NANDHAGOPAL	38	M	1642831	TVL	DNS	SEPTOPLASTY	64	165	23.51	MPC II	NEUTRAL	CL GRADE 1	35	1	GRADE 1	80	1	
231	04.07.16	GAYATHRI	20	F	1643620	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	53	156	21.78	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	90	1	
232	04.07.16	MAHESWARI	48	F	1572302	ML	DNS	SEPTOPLASTY	45	150	20	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
233	04.07.16	PUSHPA	24	F	1544890	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
234	05.07.16	SAROJA	57	F	1560012	ML	RT CSOM	RT TYMPANOPLASTY	60	161	23.15	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
235	05.07.16	KALAIARASI	35	F	1563498	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	55	158	22.03	MPC II	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
236	05.07.16	SAVITHRI	44	F	1642821	TVL	LT CSOM	CORTICAL MASTOIDECTOMY	58	160	22.66	MPC II	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
237	06.07.16	RAMANI	30	F	1566478	KVL	DNS	FESS	50	158	20.03	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	80	1	
238	06.07.16	LALITHA	47	F	1564223	ML	CHRONIC SINUSITIS	FESS	55	160	21.48	MPC I	NEUTRAL	CL GRADE 2	28	1	GRADE 1	80	1	
239	06.07.16	SHANKAR	30	M	1645214	TVL	CHRONIC SINUSITIS	FESS	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	85	1	
240	07.07.16	ANAND	32	M	1643522	TVL	APPENDICULAR ABCE	APPENDICECTOMY	63	165	23.14	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	80	1	
241	07.07.16	THAHIMA	46	F	1511098	KVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	61	163	22.96	MPC II	NEUTRAL	CL GRADE 2	19	0	GRADE 1	90	1	
242	07.07.16	GIRIDHARAN	17	M	1562781	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	60	170	20.76	MPC II	NEUTRAL	CL GRADE 3	41	3	GRADE 3	70	1	
243	08.07.16	ANNAMAL	35	F	1576390	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE 2	32	1	GRADE 1	80	1	
244	08.07.16	NAGAMMAL	60	F	1557232	ML	DNS	SEPTOPLASTY	60	158	24.03	MPC I	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
245	08.07.16	SUMITHA	18	F	1533865	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	47	155	19.56	MPC II	NEUTRAL	CL GRADE 2	27	1	GRADE 1	80	1	
246	09.07.16	LAKSHMI	18	F	1544374	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	57	156	20.94	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	80	1	
247	09.07.16	CHINNASAMY	36	M	1641125	TVL	RT CSOM	TYMPANOPLASTY	59	163	22.21	MPC II	NEUTRAL	CL GRADE 2	30	1	GRADE 1	85	1	
248	09.07.16	JAGAN	35	M	1564807	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	170	22.49	MPC II	NEUTRAL	CL GRADE 2	22	1	GRADE 1	85	1	
249	11.07.16	VIDHYA	20	F	1642712	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	51	156	20.96	MPC II	NEUTRAL	CL GRADE 1	23	0	GRADE 1	85	1	

250	11.07.16	RAJESWARI	47	F	1563098	KVL	IMPLANT FAILURE HA	IMPLANT REMOVAL	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
251	11.07.16	KAILASH	27	M	1564902	ML	DNS	SEPTOPLASTY	65	165	23.88	MPC I	NEUTRAL	CL GRADE 2	18	1	GRADE 1	90	1	
252	12.07.16	ROSY	16	F	1572214	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	50	160	19.53	MPC II	NEUTRAL	CL GRADE 2	25	2	GRADE 2	80	1	
253	12.07.16	SUMITHA	18	F	1533865	TVL	DNS	SEPTOPLASTY	53	158	21.23	MPC I	NEUTRAL	CL GRADE 1	34	0	GRADE 1	90	1	
254	12.07.16	BHAGATH	27	M	1577634	KVL	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	165	22.04	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
255	13.07.16	SAKTHIVEL	25	M	1588907	KVL	SEROMA EAR	WINDOW PROCEDURE	65	160	23.44	MPC II	NEUTRAL	CL GRADE2	21	1	GRADE 1	80	1	
256	13.07.16	SUNDARI	23	F	1566302	ML	CHRONIC SINUSITIS	FESS	55	158	22.03	MPC I	NEUTRAL	CL GRADE 2	21	1	GRADE 1	90	1	
257	13.07.16	LAKSHMI	45	F	1544374	TVL	L4-L5 HNP	LAMINECTOMY	48	155	19.98	MPC II	NEUTRAL	CL GRADE 2	36	2	GRADE 1	90	1	
258	14.07.16	BHAVANI	38	F	1568327	ML	RT CSOM	RT CORTICAL MASTOIDECTOMY	48	155	19.98	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
259	14.07.16	RAJESWARI	47	F	1563098	TVL	RT CSOM	CORTICAL MASTOIDECTOMY	56	160	21.88	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	85	1	
260	15.07.16	BHAGATH	27	M	1577634	TVL	CHRONIC SINUSITIS	FESS	54	155	22.48	MPC I	NEUTRAL	CL GRADE 1	19	0	GRADE 1	90	1	
261	15.07.16	SIVAGAMI	40	F	1560092	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	50	158	20.03	MPC I	NEUTRAL	CL GRADE 1	25	0	GRADE 1	85	1	
262	15.07.16	RASIKA	20	F	1562231	ML	DNS	SEPTOPLASTY	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	19	1	GRADE 1	85	1	
263	16.07.16	SAKTHIVEL	25	M	1588907	TVL	PTRA ARM	SSG	60	170	20.76	MPC I	NEUTRAL	CL GRADE 1	24	0	GRADE 1	80	1	
264	16.07.16	CHANDRU	50	M	1544786	KVL	L5 FRACTURE	POSTERIOR STABILISATION	60	164	22.31	MPC II	NEUTRAL	CL GRADE 2	31	1	GRADE 1	80	1	
265	18.07.16	VINOD	16	M	1562001	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDEC	50	155	20.81	MPC I	NEUTRAL	CL GRADE 1	27	1	GRADE 1	80	1	
266	18.07.16	ASHOK	24	M	1600764	TVL	CHRONIC SINUSITIS	FESS	60	165	22.04	MPC II	NEUTRAL	CL GRADE2	26	1	GRADE 1	90	1	
267	18.07.16	ANITHA	29	F	1540965	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	67	172	22.65	MPC I	NEUTRAL	CL GRADE 2	35	1	GRADE 2	80	1	
268	19.07.16	SUJATHA	35	F	1511267	KVL	SOLITARY NODULE TH	HEMITHYROIDECTOMY	60	156	24.65	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 2	80	1	
269	19.07.16	RANI	25	F	1580328	ML	RT CSOM	RT TYMPANOPLASTY	58	155	24.14	MPC II	NEUTRAL	CL GRADE 2	29	1	GRADE 1	80	1	
270	19.07.16	PUSHPALATHA	40	F	1641108	TVL	LT CSOM	MYRINGOPLASTY	57	160	22.27	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
271	20.07.16	RAJESH	16	M	1572210	ML	CHRONIC TONSILLITIS	TONSILLECTOMY	60	164	22.31	MPC I	NEUTRAL	CL GRADE 2	27	1	GRADE 1	90	1	
272	20.07.16	VINOTHINI	17	F	1569821	ML	DNS	SEPTOPLASTY	60	155	24.97	MPC II	NEUTRAL	CL GRADE 2	24	1	GRADE 1	80	1	
273	20.07.16	ANANDHI	24	F	1540083	KVL	DNS	FESS	55	159	21.76	MPC II	NEUTRAL	CL GRADE1	19	0	GRADE 1	90	1	
274	21.07.16	VARADHARAJAN	52	M	1644210	TVL	SNG THYROID	HEMITHYROIDECTOMY	67	165	24.61	MPC I	NEUTRAL	CL GRADE 2	32	1	GRADE 1	90	1	
275	21.07.16	MAHESWARAN	40	M	1569456	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	170	22.49	MPC I	NEUTRAL	CL GRADE 1	17	0	GRADE 1	95	1	
276	21.07.16	RANI	16	F	1543569	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	50	156	20.55	MPC II	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
277	22.07.16	SUSEELA	57	F	1576432	KVL	ABDOMINAL PAIN	D LAP AND PROCEES	60	164	22.31	MPC I	NEUTRAL	CL GRADE 1	27	0	GRADE 1	90	1	
278	22.07.16	KAMINI	55	F	1629701	TVL	CHOLELITHIASIS	CHOLECYSTECTOMY	53	155	22.06	MPCI	NEUTRAL	CL GRADE2	27	1	GRADE 1	85	1	
279	22.07.16	DARSHAN	27	M	1570042	ML	RT CSOM	RT MODIFIED RADICAL MASTOIDEC	60	160	23.44	MPC II	NEUTRAL	CL GRADE 2	21	1	GRADE 1	80	1	
280	23.07.16	MANIKANDAN	17	M	1571249	ML	CHRONIC SINUSITIS	FESS	55	160	21.48	MPC II	NEUTRAL	CL GRADE 2	25	1	GRADE 1	85	1	
281	23.07.16	NAGAMMAL	40	F	1557232	TVL	DNS	SEPTOPLASTY	50	156	20.55	MPC I	NEUTRAL	CL GRADE 1	31	0	GRADE 1	90	1	
282	23.07.16	DEEPA	28	F	1564378	KVL	DNS	SEPTOPLASTY	52	160	20.31	MPC I	NEUTRAL	CL GRADE 1	31	0	GRADE 1	90	1	
283	25.07.16	GIRIJA	46	F	1571553	ML	DNS	SEPTOPLASTY	53	156	21.78	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
284	25.07.16	JAGAN	35	M	1564807	TVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	58	162	22.1	MPC II	NEUTRAL	CL GRADE 1	20	0	GRADE 1	90	1	
285	25.07.16	KAILASH	27	M	1564902	TVL	DNS	SEPTOPLASTY	60	160	23.44	MPC I	NEUTRAL	CL GRADE 2	25	1	GRADE 1	85	1	
286	26.07.16	AMUDHA	31	F	1543908	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	60	156	24.65	MPC I	NEUTRAL	CL GRADE 1	15	0	GRADE 1	90	1	
287	26.07.16	VELUMANY	38	M	1574231	ML	L4-L5 DISC BULGE	LUMBAR LAMINECTOMY	60	170	20.76	MPC I	NEUTRAL	CL GRADE 2	24	1	GRADE 1	80	1	
288	26.07.16	ANNAMAKKA	40	F	1564387	KVL	CHOLELITHIASIS	LAP CHOLECYSTECTOMY	59	162	22.48	MPC I	NEUTRAL	CL GRADE 1	29	0	GRADE 1	90	1	
289	27.07.16	ROSY	16	F	1572214	TVL	CHRONIC TONSILLITIS	TONSILLECTOMY	52	157	21.1	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	85	1	
290	27.07.16	KUPPUSAMY	50	M	1568549	ML	LT CSOM	LT CORTICAL MASTOIDECTOMY	65	165	23.88	MPC II	NEUTRAL	CL GRADE 2	20	1	GRADE 1	80	1	
291	27.07.16	SELVI	40	F	1546785	KVL	LT CSOM	LT CORTICAL MASTOIDECTOMY	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	26	0	GRADE 1	85	1	
292	28.07.16	VEERARAJ	29	M	1567438	KVL	CHRONIC SINUSITIS	FESS	64	166	23.33	MPC I	NEUTRAL	CL GRADE 1	18	0	GRADE 1	90	1	
293	28.07.16	SUNDARI	23	F	1566302	TVL	CHRONIC SINUSITIS	FESS	47	161	18.13	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	
294	28.07.16	SAMUEL	59	M	1576340	ML	LT CSOM	LT MODIFIED RADICAL MASTOIDECT	60	158	24.03	MPC I	NEUTRAL	CL GRADE 1	16	0	GRADE 1	85	1	
295	29.07.16	GAYATHRI	35	F	1569842	ML	DNS	SEPTOPLASTY	53	157	21.5	MPC II	NEUTRAL	CL GRADE 2	26	1	GRADE 1	90	1	
296	29.07.16	DEEPALAKSHMI	38	F	1577643	KVL	CHRONIC TONSILLITIS	TONSILLECTOMY	62	159	24.52	MPC II	NEUTRAL	CL GRADE 2	60	4	GRADE 4	70	2	
297	29.07.16	BHAVANI	38	F	1568327	TVL	RT CSOM	RT CORTICAL MASTOIDECTOMY	55	165	20.2	MPC II	NEUTRAL	CL GRADE2	35	1	GRADE 1	80	1	
298	30.07.16	MAHIMA	40	F	1544326	KVL	CHRONIC SINUSITIS	FESS	56	166	20.32	MPC I	NEUTRAL	CL GRADE 1	36	0	GRADE 1	80	1	
299	30.07.16	KARUNAKARAN	35	M	1570648	ML	CHRONIC SINUSITIS	FESS	60	162	22.86	MPC II	NEUTRAL	CL GRADE 2	17	1	GRADE 1	90	1	
300	30.07.16	RAJESWARI	47	F	1563098	KVL	IMPLANT FAILURE HA	IMPLANT REMOVAL	52	156	21.37	MPC I	NEUTRAL	CL GRADE 1	21	0	GRADE 1	90	1	

10

INTRODUCTION

Airway management is the fundamental aspect of anesthetic practice and emergency and critical care medicine . Endotracheal intubation is a rapid, non surgical and safe technique that achieves all the goals of airway management, maintains airway patency, protects the lungs from aspiration and permits leak free ventilation during mechanical ventilation, and hence remains the gold standard procedure for airway management[1]

INSTITUTIONAL ETHICAL COMMITTEE,
STANLEY MEDICAL COLLEGE, CHENNAI-1

Title of the Work	: A Randomised Comparative study of King Vision Laryngoscopy, Tru view Laryngoscopy and Macintosh Laryngoscopy in routine airway management at SMC
Principal Investigator	: Dr. K Deepthi
Designation	: PG, MD (Anaesthesiology)
Department	: Department of Anaesthesiology Government Stanley Medical College, Chennai-01

The request for an approval from the Institutional Ethical Committee (IEC) was considered on the IEC meeting held on 13.01.2016 at the Council Hall, Stanley Medical College, Chennai-1 at 2PM

The members of the Committee, the secretary and the Chairman are pleased to approve the proposed work mentioned above, submitted by the principal investigator.

The Principal investigator and their team are directed to adhere to the guidelines given below:

1. You should inform the IEC in case of changes in study procedure, site investigator investigation or guide or any other changes.
2. You should not deviate from the area of the work for which you applied for ethical clearance.
3. You should inform the IEC immediately, in case of any adverse events or serious adverse reaction.
4. You should abide to the rules and regulation of the institution(s).
5. You should complete the work within the specified period and if any extension of time is required, you should apply for permission again and do the work.
6. You should submit the summary of the work to the ethical committee on completion of the work.

MEMBER SECRETARY, 13/1/16.
IEC, SMC, CHENNAI.

MEMBER SECRETARY
ETHICAL COMMITTEE,
STANLEY MEDICAL COLLEGE
CHENNAI-600 001.