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Original Article

Anaesthesia Section

Baska Mask in Patients undergoing Elective Breast Surgeries under General Anaesthesia: An Observational Study

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ABSTRACT

Introduction: Supraglottic airway devices are newer safer alternative devices to endotracheal intubation during General Anaesthesia. The Baska mask is a novel third generation Supraglottic Airway Devices (SADs) with an added advantage of silicon self-recoiling, non inflatable cuff. Postgraduate trainees will need hands on training in all available airway securing devices and have experience in using the Baska mask and also complications associated with it.

Aim: To assess the successful insertion of Baska mask by postgraduate trainees, and its placement in 50 low-risk female patients posted for breast surgeries, and also to determine the correct placement using fibreoptic bronchoscope.

Materials and Methods: The present study was an observational study conducted at Kidwai Cancer Institute, Bangalore, Karnataka, India from January 2019 to January 2020 in which a total of 50 study participants were selected, and Baska mask was inserted by postgraduate trainees in all patients. The placement of the mask was assessed by fibreoptic bronchoscope using Brimacombe scoring. Ease of insertion, time required for insertion and attempts required for the insertion of the mask was assessed along with postoperative complications. Student's t-test and Chi-square test were used to study the parameters on continuous scale and categorical scale, respectively.

Results: The mean age of the study population was 46.9±7.8 years. The overall success rate for device insertion was 96%, while the success rate for the first insertion attempt was 60%. The device was 'easy' to insert among 48% of patients, and mean time required for insertion was 20.54±10.7 sec. The mean airway leak pressure was 39.17 cmH_2O. Postoperative complications were notably less with sore throat seen in 20.8%, and the incidence of other side-effects like laryngospasm was nil.

Conclusion: Baska mask can be successfully and safely used by postgraduate trainees as a tool for securing the airway. As learning curve for Baska mask is short, it can be used safely for training postgraduate trainees and to improve their expertise in using the Baska mask.

Keywords: Brimacombe scoring, Fibreoptic bronchoscope, Trainees

INTRODUCTION

Securing the airway during general anaesthesia is achieved with endotracheal intubation most of the times. Invention of SADs have brought revolutionary changes in airway management during general anaesthesia, both in spontaneously breathing patients and also in controlled ventilation. The ideal SADs should provide high airway seal pressure with low-risk for pulmonary aspiration [1]. Commonly used SADs are Laryngeal Mask Airways (LMA), I-gel, and Baska mask. The Baska mask, a third generation SAD, is made of medical grade silicon self-recoiling, non inflatable cuff. The cuff is designed in such a way that during positive pressure ventilation, the seal opposes the glottic structure and augments the seal pressure incrementally without producing the tissue compression. The sump cavity of the cuff provide separate channel for aspiration of gastric contents continuously and intermittently [2,3]. These features of the mask render the patient to have a lesser risk of pulmonary aspiration of secretions or gastric contents. The integrated bite-block reduces the chances of patients biting and blocking the airway. The extended hand-tab attached to the cuff allows the operator to flex the device during the insertion. Insertion of the device is done in a head neutral position. Baska masks are available in four sizes and can be used based on the weight of the patients. Postgraduate trainees need to be trained to use the available airway securing devices and get expertise in the technique and usage of the devices. Using any new device will have an initial learning curve. Postgraduate trainees need to know-how easy or difficult it is to use the Baska mask, techniques required for successful placement of the mask and the complications associated with the usage of the mask.

Most Baska mask studies have been done with trained anaesthesiologists who had used Baska mask for more than 10 times [4]. Manoeuvres like jaw thrust was required for correct placement in case of difficulty in insertion. In the clinical trial by Fotedar S et al., they have found it easy to insert Baska mask in first attempt, however additional manoeuvres applied and experience of proceduralist were not mentioned [5]. In a study done by Al-Rawahi SAS et al., all proceduralist involved had experience of more than 15 insertions of the mask and they were of opinion that Baska mask had significantly shorter placement time [6]. Most of the studies concluded that Baska mask placement required significantly shorter placement of time and with usage of additional manoeuvres most of the placements of mask was successful. This study was taken up to observe the usage of Baska mask by the anaesthesia postgraduate trainees with regard to the ease of insertion, success rate and its placement.

MATERIALS AND METHODS

An observational study of Baska mask was done in Kidwai Memorial Institute of Oncology, Bangalore, Karnataka, India, from January 2019 to January 2020. The Institutional Ethical Committee (IEC) clearance was obtained (KCI/MEC/001/04.December 2018).

Sample size calculation: Sample size was calculated based on the results of a previous study. With a mean sealing pressure of 35.7 cmH_2O, standard deviation of 9, and alpha error of 5%, the sample size was calculated to be 50 [7].

Inclusion criteria: Fifty patients were included in the study, between 18-60 years of age with American Society of

Anaesthesiologists (ASA) I and II status for breast surgeries requiring controlled ventilation.

Exclusion criteria: Patients with difficult airway, Body Mass Index (BMI) of >20 kg/m^2, patient refusal, patients with abdominal distension were excluded.

Study Procedure

After a routine preanaesthetic examination a written informed consent was taken for all the patients enrolled in the study. All patients received tablet ranitidine 150 mg and tablet alprazolam 0.5 mg the night before, and were kept nil per oral for six hours prior to surgery. Patients were connected to the standard monitors and heart rate, non invasive blood pressure (systolic and diastolic blood pressure, mean arterial pressure), Electrocardiogram (ECG), oxygen saturation were recorded. The size of the device was decided by the trainee anaesthesiologist who was inserting the device based on patients body weight and manufacturers guidelines. The Baska mask of size 3 for patients weighing 30-50 kg and size 4 for patients weighing 50-70 kg and size 5 for patients weighing >90 kg were used. Integrity of Baska mask was checked by occluding the airway opening of the connector end of the device with one thumb, holding the mask head with the other hand and placing the thumb over the airway opening of the mask to seal. Pressure was applied for five seconds to confirm there is no leak in the device [8]. Under aseptic precautions, the device was lubricated with lignocaine jelly.

Basal haemodynamic parameters were recorded. Patients were premedicated with inj. midazolam 0.02 mg/kg, inj. glycopyrrolate 0.2 mg. Patients were preoxygenated for three minutes with 100% oxygen via face mask before induction. Induction was done with inj. propofol 2 mg/kg and fentanyl 1.5-2 µg/kg, and once adequate ventilation was confirmed inj. rocuronium 0.9 mg/kg was given. After 90 seconds of mask ventilation Baska mask was inserted by the postgraduate trainees (they had no previous training). When the Baska mask was inserted the mouth was kept open, the proximal and firmer part of the mask was compressed between thumb and two fingers and the mask was pushed. Whenever required, the tab was used to help negotiate the palato-pharyngeal curve, while the mask was fully inside the mouth. When the tip of the mask passed around the curve the tab was released. The mask was advanced until a resistance was felt, when the tip of the mask was engaged into the upper end of the oesophagus [8]. Once placement of the device was done, the adequate ventilation was confirmed with bilateral chest rise and on auscultation bilateral air entry was equal and appearance of square wave form in capnograph [1,9,10]. If ventilation was found to be inadequate, manipulation like gentle pushing or pulling of the device, chin lift, jaw thrust, head extension or neck flexion were considered. Reinsertion of the device by senior anaesthesiologist was considered if adequate ventilation was not achieved even after gentle manipulations. If inadequate ventilation persists even after three attempts of device insertion, endotracheal intubation was considered.

Maintenance of anaesthesia was with 33% of oxygen, 66% of nitrous oxide, 1-1.5% of isoflurane, intermittent doses of inj. rocuronium 0.06 mg/kg and Intermittent Positive Pressure ventillation (IPPV). Placement of Baska mask was confirmed by adequate ventilation, good chest rise and $ETCO_2$ curve. After five minutes the correct placement of Baska mask was noted and confirmed using fibreoptic bronchoscope with Brimacombe Scoring [10]. At the end of the surgery, anaesthetic agents were discontinued and patients residual paralysis was reversed with inj. neostigmine 0.05 mg/kg body weight and inj Glycopyrrolate 0.01 mg/kg body weight. Once patient was awake and neuromuscular recovery was adequate, the device was removed. The device was inspected for the blood staining and patients oral cavity examined for any injury. Since the study aimed at observing the usage and efficacy of the mask inserted by postgraduate trainees, six 2nd year postgraduate trainees were selected (five males and one female). All the postgraduate trainees were made to observe Baska mask insertion and were thought prior by anaesthesia consultants on different set of patients. The ease of insertion [Table/Fig-1] time and number of attempts required for insertion, oropharyngeal sealing pressure, Brimacombe Scoring [Table/Fig-2] [10] and lastly injuries and postoperative complications were noted. Time for insertion was taken as time from picking the device, to the time of confirmation of effective ventilation by observing the chest rise, bilateral air entry on auscultation and appearance of square wave form capnograph [11]. Number of attempts of insertion was taken as attempts required for insertion of the device till correct placement of device was confirmed by the consultant anaesthesiologist. Oropharyngeal sealing pressure was noted at five minute postinsertion of the device [1,10,12]. Using closed circuit in DRAGER FABIUS machine keeping the flow rate at 5 L/min, the adjustable pressure limiting valve of the circle system are completely closed (70 cmH_2O). The plateau pressure at which an audible noise was detected using a stethoscope placed just lateral to the thyroid cartilage was taken as the airway leak pressure. Maximum airway pressure limit allowed was 50 cmH_2O. Haemodynamic parameters (HR, SBP, DBP, MAP, SpO_2 and $EtCO_2$) were recorded at basal, after induction of anaesthesia, after insertion of the device and every 5 minutes till 15 minutes after insertion of the device. The patients were inspected for any injury of the lips, teeth, or tongue, and device for any blood stain after its removal at the end of the surgery. Postoperative complications (sore throat, hoarseness of voice, and dysphagia) were looked for at two hours [Table/Fig-3] [13].

Score 1 (easy)	Easy insertion on first attempt with no need for adjustment
Score 2 (slight difficulty)	Slight difficult insertion on first attempt with atleast one adjustment manoeuvre
Score 3 (obvious difficulty)	Obvious difficult insertion on second attempt
Score 4 (impossible)	No SAD insertion

[Table/Fig-1]: Ease of insertion [1].

Grade (anterior posterior rima glottidis distance)	
1	75-100%
2	50-75%
3	25-50%
4	0-25%
5	No vocal cords, only epiglottis visible
6	No vocal cords or epiglottis Visible

[Table/Fig-2]: Brimacombe scoring [10].

Sore throat	Score
None (no sore throat)	0
Mild (complains of sore throat only on asking)	1
Moderate (complains of sore throat on his/her own)	2
Severe (change of voice or hoarseness, associated with throat pain)	3

[Table/Fig-3]: Grading of severity of sore throat [13].

STATISTICAL ANALYSIS

The R statistical software was used for analysis of the data and Microsoft Word and Excel to generate graphs and tables. Descriptive statistical analysis was carried out in the present study. Results on categorical measurements presented in numbers (%) and results on continuous measurements are presented on Mean±Standard Deviation. Student's t-test was used to find the significance of the study parameters on continuous scale and Chi-square test has been used to find the significance of study parameters on categorical scale. The p-value <0.05 was considered as significant.

RESULTS

Demographic details of the patients are depicted in [Table/Fig-4]. The minimum age was 24 years, and the maximum was 60 years,

with mean age being 48.28±10.31 years. The mean body weight was 59.04±10.060 kg, and the mean BMI was 22.94±3.91 kg/m^2.

Age in years (all females)	N (%)	Weight in kgs	N (%)
≤30	2 (4)	≤40	10 (20)
31-40	9 (32)	41-50	15 (30)
41-50	16 (32)	51-70	17 (34)
51-60	23 (46)	>70	8 (16)
Mean age±SD	46.9±7.8	Mean weight±SD	51.3±3.6

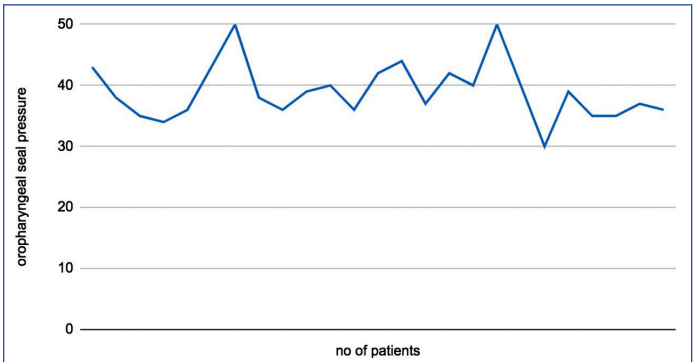
[Table/Fig-4]: Distribution of age and weight.

[Table/Fig-5] shows the attempts of insertion. In 30 patients (60%) the mask was successfully inserted on the first attempt, while in two (4%) it was impossible. The overall success rate of the Baska mask insertion was 96%.

Attempts of insertion	N (%)	Time for Insertion	N (%)
First	30 (60)	10-20 sec	30 (60)
Second	14 (28)	21-30 sec	14 (28)
Third	4 (8)	31-40 sec	4 (8)
Impossible	2 (4)	-	-
Mean number±SD of attempts	12.5±12.79	Mean±SD insertion time	20.54±10.7 sec

[Table/Fig-5]: Attempts of insertion.

Time taken for insertion of Baska mask is depicted in [Table/Fig-5]. The mean duration of successful insertion of Baska was 20.54 seconds, and first Baska mask insertion was of 35.5 seconds duration. Initial attempts in insertion of Baska mask took a little longer time but no more than 40 seconds. Oropharyngeal seal pressure is depicted in [Table/Fig-6]. The mean oropharyngeal seal pressure was 39.17 cmH_2O. Over period of time the seal pressure reached upto 50 cmH_2O, where the testing was stopped as per protocol.



[Table/Fig-6]: Oropharyngeal seal pressure.

During positive pressure ventilation, audible leak from the mask was heard in 10 of 48 patients and among them five were in the first 10 recruited patients. Of these 10 patients, only three had persistent audible leak after five minutes of insertion which indicates that cuff seal pressure improved over time. Ease of insertion grading was as seen in [Table/Fig-7]. In 24 (48%) patients it was found that the device was easy to insert, and in 17 (34%) it was easy to insert with slight difficulty, and in only 2 (4%) it was impossible to insert and had to be intubated to secure the airway.

Ease of insertion	N (%)
Easy	24 (48%)
Slight difficulty	17 (34%)
Obvious difficulty	7 (14%)
Impossible	2 (4%)

[Table/Fig-7]: Ease of insertion.

Fibreoptic evaluation of Baska mask placement was evaluated using Brimacombe scoring. In 35 (72.9 %) patients 75-100% rima glottidis was seen and the mean score was found to be 70% through the Fibreoptic bronchoscope with the Baska mask in-situ [Table/Fig-8].

Grade (anterior posterior rima glottidis distance)		N (%)
1	75-100%	35 (72.9)
2	50-75%	5 (10.4)
3	25-50%	0
4	0-25%	0
5	No vocal cords, only epiglottis visible	5 (10.4)
6	No vocal cords or epiglottis visible	3 (6.3)

[Table/Fig-8]: Brimacombe scoring n=48.

Haemodynamic parameters are depicted in the [Table/Fig-9,10]. Mean heart rate and mean arterial pressures showed no statistical significance.

Time interval	Mean HR (beats per minute)	p-value
Baseline	88.29±9.36	0.574
After induction	82.88±7.86	0.873
After insertion	83.21±8.40	0.786
5 min	83.63±8.72	0.618
10 min	84.50±8.12	0.621
15 min	82.67±5.91	0.650

[Table/Fig-9]: Mean HR values.

Time interval	Mean arterial pressures (mmHg)	p-value
Baseline	105.08±13.29	0.649
After Induction	96.29±11.54	0.181
After Insertion	90.63±9.34	0.387
5 min	87.58±10.71	0.192
10 min	89.83±7.36	0.572
15 min	89.08±8.38	0.378

[Table/Fig-10]: Mean arterial pressures values.

In 10 patients with Baska mask insertion airway injuries were noted (blood stain on the device). No other injuries were noted. Among 10 patients who had sore throat, six patients had Grade 1 degree of sore throat. Hoarseness of voice and Dysphagia were not seen in any patients [Table/Fig-11].

Sore throat	n (%)
Grade 0	38 (79.2)
Grade 1	6 (12.5)
Grade 2	4 (8.3)
Grade 3	0
Total	48

[Table/Fig-11]: Grading of sore throat n=48.

DISCUSSION

This study was conducted to know the ease of Baska mask usage and placement by anaesthesia postgraduate trainees. The study was conducted with postgraduate trainees because trainees should know-how to use the available airway devices to secure the airway. Also, they should have sufficient hands-on training in insertion of the device and correct placement of the device. They should have a knowledge also on to deal with the complications that can arise in using these new devices and also to learn the techniques required in correct placement of the device. During placement of the device in the initial few patients, the time to insert the device was more, and it required manoeuvring techniques. Successful insertion of the Baska mask by trainees in first attempt was 60%, with an overall success rate being 96%. Among these, ease of insertion was 'easy' in 48% of

patients and 'slight difficult' in 34% requiring manoeuvres in insertion. In a similar study done on Baska mask, in 50 adult patients requiring surgical intervention, overall 'easy' to 'very easy' insertion rate was 92%, and first attempt success rate was 88% [9].

Manoeuvres like compressing the proximal, firmer part of the mask between thumb and fingers and by pulling the hand tab attached to the cuff changed the degree of flexion of the device along with neck movements facilitating an easier insertion. The mean insertion time of 20.54 seconds indicates that Baska mask can be safely and easily used in patients to secure the airway by postgraduate trainees however more studies are required in obese patients. In another study, the mean insertion time was 23.9 seconds, which was almost similar to the present study [10]. The time required to insert the mask depends on the expertise of the investigator and the ease of insertion is influenced by the patient factors. Mean airway sealing pressure was 39.17 cmH_2O with maximum being 50 cmH_2O. The shape of the Baska mask cuff, self-inflatable property, and its recoiling property provides a good sealing pressure and effective ventilation during positive pressure ventilation. Similar airway sealing pressure of 42.46 cmH_2O was noted in a study of 100 patients posted for short duration surgeries including laparoscopic surgeries. This shows that Baska mask gives adequate sealing pressure and can be safely used [12]. In a study done on 100 patients posted for laparoscopic surgeries, they found that mean airway seal pressure was 33.54 cmH_2O which corelates well with present study value [14]. Brimacombe scoring of fibreoptic visualisation of anatomic position of the mask in-situ showed grade 1 in 72.9% of patients. Better the Brimacombe grading, airway sealing pressures are better however, ventilation was not compromised in any grades. Grade 5 was seen during initial attempts of insertion and in one difficult insertion of the mask. Another study, on 100 patients posted for surgery, revealed that 78% patients had grade 1 Briacombe grading, and there was no compromise in ventilation among any grades [12].

Low incidence of postoperative complications were noted in other studies on Baska Mask [10,12]. In a similar study, airway injuries were noted in 5% of patients and mild sore throat was noted in 15% of patients in the immediate postoperative period [13]. In this study, 20% of patients had airway injuries which was noted as blood stain in the device. This can be attributed to difficult insertion and the learning curve for postgraduate trainees. Postoperative complications like hoarseness of voice and dysphagia were not seen in any patients but sore throat was noted in 20.8% of the patients in immediate postoperative period. This is a major advantage over other supra glottic devices. Same postoperative complications like sore throat, dysphagia and dysphonia were evaluated in a similar study and the incidence was found to be low [15].

The advantages of this device are, firstly, placement of device could be improvised with repeated usage and it required a shorter learning curve. Secondly, leak around the mask gradually decreased over the period of time with positive pressure ventilation. This was mainly due to improvement of cuff seal with glottic opening with each positive pressure ventilation. Thirdly, presence of suction port helps in aspiration and drainage of secretions. With greater airway seal pressure because of the cuff, it provides good ventilation and also protects against aspiration of gastric contents and separate channel for drainage of secretions, which makes Baska mask better among the available SADs. Difficulties encountered with Baska mask was particularly with respect to the number of attempts required for the insertion of Baska mask initially and also with the correct depth of placement of Baska mask. Positioning of the cuff with good oropharyngeal seal pressure and also manoeuvres to minimise the leak. All these were mainly because of lack of expertise by the postgraduate trainees in usage of Baska mask. These difficulties can also be attributed to the patient related factors, like, large tongue, inadequate relaxation, improper positioning of the patient and dentition. In one of the study done on Baska mask insertion on 30 patients they found similar difficulties like difficult insertion in earlier attempts, repeated adjustment to get good seal and insufficient depth of insertion [7]. In a study where Baska mask and I-gel was used for procedures requiring general anaesthesia it was found that they experienced difficulties in placing the device, but it became better with the use of muscle relaxants. [16]. Repeated attempts were required for insertion of Baska mask in a study done on patients posted for laparoscopic surgeries [17]. In yet another study on 150 patients, Baska mask was difficult to insert, requiring more insertion attempts and taking longer time to insert, however, expertise of the person inserting Baska mask was not mentioned [17]. Based on the literature review it can be concluded that Baska mask is safe and can be easily used by postgraduate trainees. It also has a short learning curve.

Securing an airway as early as possible is the top priority for anaesthesiologists. The second major concern is to prevent aspiration and have good effective ventilation under general anaesthesia. Lastly, devices used for securing the airway should have minimal postoperative morbidity. Baska mask ensures good patient comfort, easy compliance and less learning curve by the user. All these properties make Baska mask a safe alternative to endotracheal intubation.

Limitation(s)

The haemodynamic parameters have not been assessed for the entire duration of surgery and at the time of removal of Baska mask. The future scope of this study includes the evaluation of the Baska mask in cases of emergency situation and its usage in patients with anticipated and unanticipated difficult airway. Further Baska mask usage in obese patients and in patients undergoing laparoscopic surgeries can be evaluated separately. The other major limitation was the cost factor of Baska mask and also that it cannot be reused. However, with introduction of reusable masks this limitation can be taken care of.

CONCLUSION(S)

Baska mask is one of the supraglottic device which is easy to insert, provides effective ventilation and causes least complications intraoperatively and postoperatively. Baska mask also avoids injuries caused by laryngoscopy and intubation. Learning curve for the usage of Baska mask is short. Hence, Baska mask can be safely used for the training purpose of anaesthesia postgraduate trainees. Also, because of its advantages the device can be used as a safe alternative to endotracheal intubation even during training period of postgraduate trainees.

REFERENCES

[1] Aziz RA, Osman YM. Comparison of I-gel with Baska mask airway for controlled ventilation in obese patients undergoing ambulatory surgery: A prospective randomized trial. Int J Anesth Clinl Med. 2017;5(4):29-35. Doi: https://doi.org/10.11648/j.ja.20170504.12.

[2] Miller DM. A proposed classification and scoring system for supraglottic sealing airways: a brief review. Anesth Analg. 2004;99(5):1553-59. Doi: https://doi.org/10.1213/01.ANE.0000134798.00069.2B. PMID: 15502064.

[3] Michalek P, Donald M. Miller airway management evolution: In a search for an ideal extraglottic airway device. Prague Medical Report. 2014;115:87-103. Doi: https://doi.org/10.14712/23362936.2014.40. PMID: 25626328.

[4] Tosh P, Kumar RB, Sahay N, Suman S, Bhadani UK. Efficacy of Baska mask as an alternative airway device to endotracheal tube in patients undergoing laparoscopic surgeries under controlled ventilation. J Anaesthesiol Clin Pharmacol. 2021;37(3):419-24. Doi: 10.4103/joacp.JOACP_339_19. Epub 2021 Oct 12. PMID: 34759555.

[5] Fotedar S, Singh S, Tripathi RK. The Baska mask trial in patients undergoing laparoscopic cholecystectomies. Int J Sci Res. 2018;8(3). Doi: https://doi.org/10.29322/IJSRP.8.3.2018.p7515.

[6] Al-Rawahi SAS, Aziz H, Malik AM, Khan RM, Kaul N. A comparative analysis of the Baska® Mask vs. Proseal® laryngeal mask for general anesthesia with IPPV. Anaesth Pain & Intensive Care. 2013;17(3):233-36.

[7] Alexie V, Salim A, Kevin LG, Laffey JG. An observational study of the Baska® mask: A novel supraglottic airway. Anaesthesia. 2012;67:640-45. Doi: https://doi.org/10.1111/j.1365-2044.2012.07140.x. PMID: 22563956.

[8] Baska: http://www.baskamask.com.au/Accessed on August 20, 2018.
[9] Zundert TV, Gatt S. The Baska mask® -A new concept in self-sealing membrane cuff extraglottic airway devices, using a sump and two gastric drains: A critical evaluation. J Obstet Anaesth Crit Care. 2012;2:23-30. Doi: https://doi.org/10.4103/2249-4472.99313.
[10] Brimacombe J, Berry A. A proposed fiber-optic scoring system to standardize the assessment of laryngeal mask airway position. Anesth Analg. 1993;76:457.
[11] Brain A. The laryngeal mask: A new concept in airway management. Br J Anaesth. 1983;55(8):801-6. Doi: https://doi.org/10.1093/bja/55.8.801. PMID: 6349667.
[12] Kumar AMR, Shetty SM, Marulasidappa M, Parmar P, Vyshnavi S. Baska mask®-A third generation supraglottic airway device in clinical practice: A prospective observational study. Indian J Clin Anaesth. 2018;5(4):576-81. Doi: https://doi.org/10.18231/2394-4994.2018.0109.
[13] Canbay O, Celebi N, Sahin A, Celiker V, Ozgen S, Aypar U. Ketamine gargle for attenuating postoperative sore throat. Br J Anaesth. 2008;100(4):490-93. Doi: https://doi.org/10.1093/bja/aen023. PMID: 18310675.
[14] Chaudhary UK, Mahajan SR, Mahajan M, Sharma C, Sharma M. A comparative analysis of the Baska mask versus I-gel for general anesthesia in surgical patients undergoing laparoscopic cholecystectomy. Acta Medica International. 2018;5(2):69-73. Doi: https://doi.org/10.4103/ami.ami_41_18.
[15] Tosh P, Rajan S, Kumar L. Incidence and severity of postoperative pharyngolaryngeal complications following use of baska mask versus endotracheal intubation. Anesth Essays Res. 2019;13(3):481-85. Doi: https://doi.org/10.4103/aer.AER_106_19. PMID: 31602065.
[16] Sachidanada R, Shaikh S, Bhat VK. Comparison between the Baska mask and I-gel for minor surgical procedures under general anaesthesia. Turk J Anaesthesiol Reanim. 2019;47(1):24-30. Doi: https://doi.org/10.5152/TJAR.2018.86729.
[17] Alexiev V, Ochana A, Abdelrahman D, Coyne J, Mc Donnell JG, Toole DPO, et al. Comparison of the Baska® mask with the single-use laryngeal mask airway in low-risk female patients undergoing ambulatory surgery. Anaesthesia. 2013;68(10):1026-32. Doi: https://doi.org/10.1111/anae.12356. PMID: 23855898.

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