

Prospective Randomized Comparative Single Blinded Case Control Study Of Fess Baska Mask Is An Effective Alternative To Endotracheal Tube For The Functional Endoscopic Sinus Surgeries.

Dr. G. Poonkuzhali, MD, (Anaes)

Senior Asst. Professor Department of Anaesthesiology, Coimbatore Medical College, Coimbatore, Tamil Nadu

Date of Submission: 01-01-2020

Date of Acceptance: 16-01-2020

I. Introduction:

FESS is the most common procedure performed in nasal area to improve nasal airflow and ventilation. BASKA FESS mask is new novel supraglottic airway device with self-sealing membranous variable pressure cuff silicon mask, named due to its dedicated use in FESS.

Aim Of The Study:

Compare the hemodynamic conditions and intra operative surgical field bleeding between the two groups of patients undergoing functional endoscopic sinus surgery.

SAMPLE SIZE:

25 patients in each group.

STUDY PERIOD:

January 2019 – April 2019

INCLUSION CRITERIA:

Both genders of age group 20 – 50 years

ASA 1 and ASA 2 patients

Surgery duration < 2 hours

EXCLUSION CRITERIA

Patients refusal

Obesity

Systemic hypertension

COPD

Inadequate mouth opening

Anticipated difficult airway

Recurrent cases

Extensive sinonasal polyposis

II. Methodology:

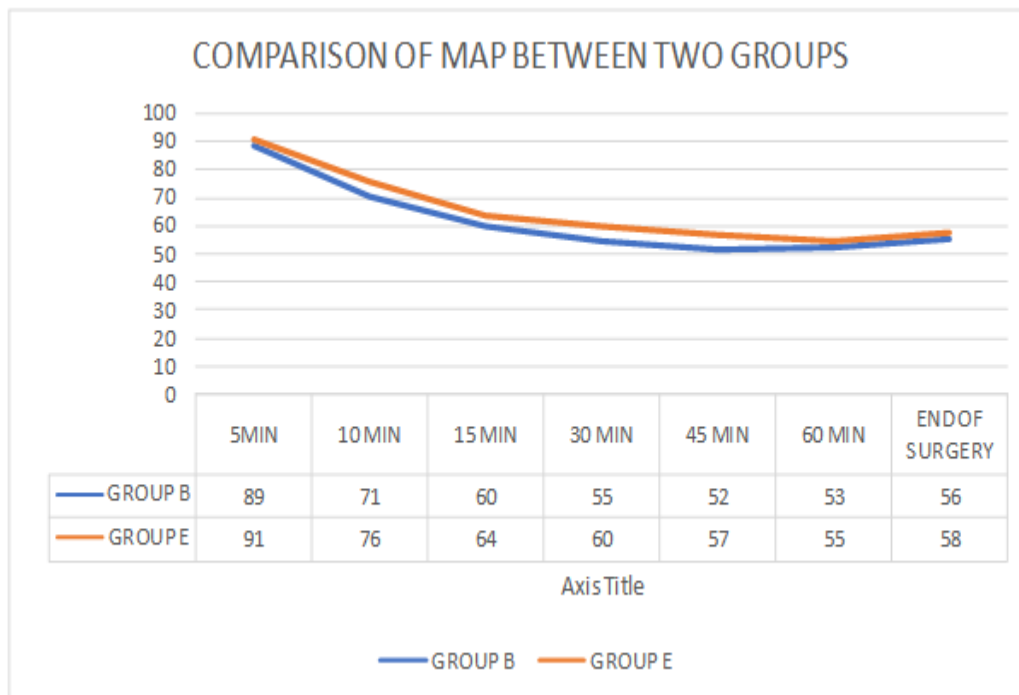
After approval by the institutional ethical committee and written consent from the patient study population were randomly allocated into BASKA FESS mask group (Group B) and Endotracheal tube group (Group E). Base line vitals were recorded. (HR, SBP, DBP, MAP)

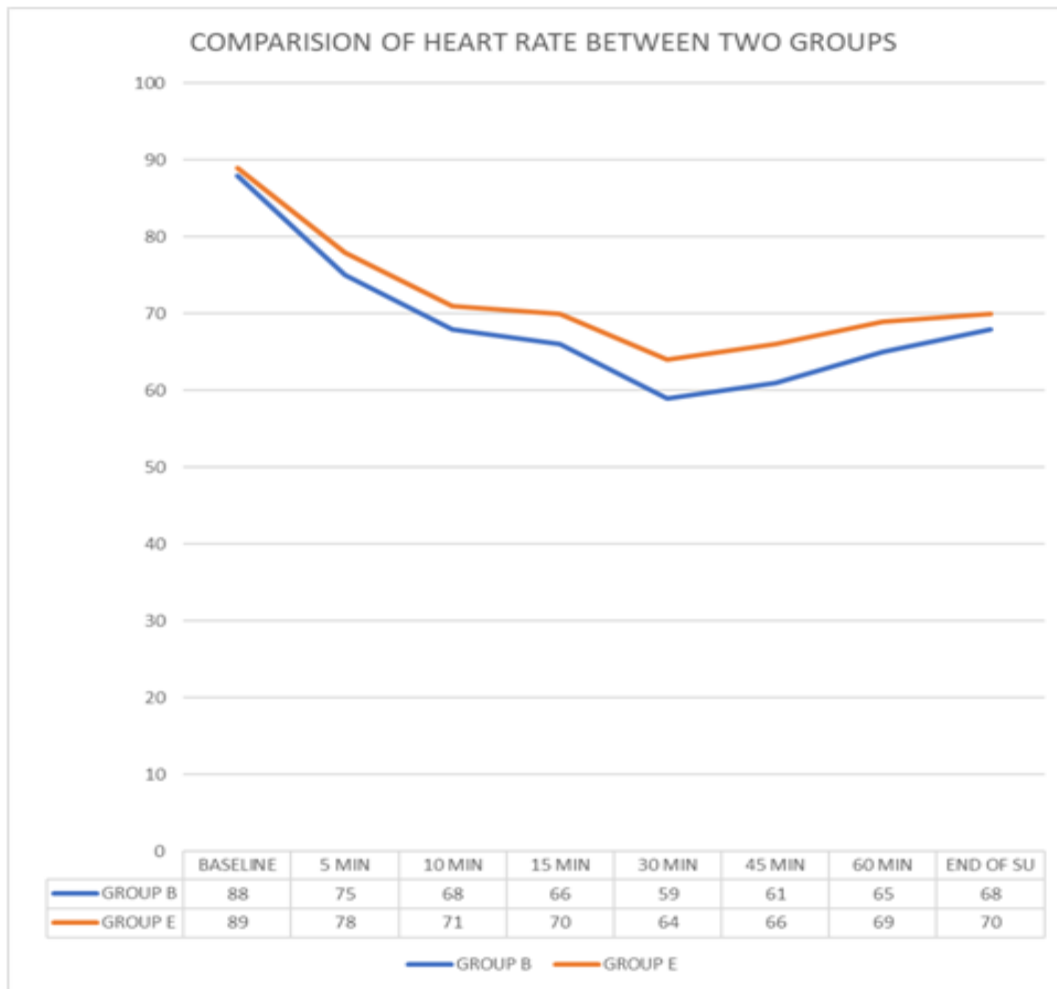
After premedication, Patients were induced with Inj. Propofol 2mg/kg, Inj. Atracurium 0.5 mg/kg. After assessing adequate jaw relaxation BASKA FESS mask size of 3 or 4 and Endotracheal tube size of 7-8 mm were used for intubation. Anaesthesia was maintained with N₂O /O₂, Sevoflurane, inj, Atracurium 0.1 mg/kg and inj. dexmed infusion.

Hemodynamic changes recorded at 5 min, 10 min, 15 min and every 15 min till the end of surgery and after extubation. Surgical field bleeding assessed by 6 point Fromme et al scale for every 15 min.

GRADE	ASSESEMENT
0	No bleeding
1	Slight bleeding , no suction required
2	Slight bleeding , occasional suctioning required
3	Slight bleeding , frequent suctioning required.bleeding threatens surgical field a few seconds after suction is removed
4	Moderate bleeding, frequent suctioning required,bleeding threatens surgical field directly after suction is removed.
5	Severe bleeding, constant suctioning required,bleeding appears faster than evacuation .

PARAMETERS	GROUP B (n= 20)	GROUP E (n= 20)
SEX RATIO F/M	9/11	10/10
AGE (YEAR)	42.2±13.1	44.1±11.6
WEIGHT (KG)	78.3±11.0	80.2±12.2
DIABETES	2	1
BRONCHIAL ASTHMA	1	1





III. Results:

Demographic profile statistically insignificant ($p > 0.05$) Lower incidence of increased HR and MAP in Group B than Group E with statistically significant $p < 0.05$. The visibility of operative field was better in Group B than Group E with significant $p < 0.05$.

IV. Discussion:

The FESS Baska mask is designed to be shorter than the standard Baska mask
It is fitted with a curved connector at 120 degree, during surgery it does not interfere with the surgical field
Effective IPPV without stomach inflation
No need to insert a gastric tube when using Baska FESS mask
Effectively clear blood and secretions during procedure through the suction vent.

V. Conclusion:

BASKA FESS mask is a better alternative to Endotracheal tube for FESS due to rapid onset of hemodynamic stability with low MAP, less blood loss and better operative field all which in turn reduces the duration of surgery.

References:

- [1]. Ahmed MZ, and Vohra A. The reinforced laryngeal mask airway (RLMA) protects the airway in patients undergoing nasal surgery – An observational study of 200 patients. *Can J Anesth* 49:863-866,2002.
- [2]. Stammberger H. Anatomic and pathophysiological concepts. In *Functional Endoscopic Sinus Surgery*. Philadelphia:BC Decker, 321-333,1991.
- [3]. Baska mask instructions for use. http://baskamask.net/main/page_instructions_for_use_single_use_instructions.html (accessed 15/03/2012).

Dr. G. Poonkuzhali, et.al. "Prospective Randomized Comparative Single Blinded Case Control Study Of Fess Baska Mask Is An Effective Alternative To Endotracheal Tube For The Functional Endoscopic Sinus Surgeries." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(1), 2020, pp. 06-09.