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RESEARCH ARTICLE

COMPARISON BETWEEN TWO SUPRA GLOTTI CAIR WAY DEVICE SI-GEL AND LMA-SUPREME IN SHORT LAPROSCOPIC SURGERIES UNDER GENERAL ANAESTHESIA

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Key words:-
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Abstract

Aims And Objectives: In short laproscopic surgeries , 2nd generation supraglottic airway devices are recommended as good and safe alternative to intubation .We compared I gel and LMA supreme in short laproscopic surgeries under general anaesthesia with respect to ease and time for insertion ,the number of attempts, seal pressure under general anaesthesia Secondary- To compare hemodynamic changes and post of complications like sore throat ,blood staining of device ,bronchospasm , laryngospasm .

Materials And Method Study Design: Randomized , prospective, single blind, comparative interventional study METHODS- Eighty patients between 18-60 years of age of either sex, BMI < 30, ASA- I and ASA- II undergoing short laproscopic surgeries of less than one hour duration under general anaesthesia were included in this study after approval of institutional ethical committee. They were randomly allocated to I gel [n=30] and supreme [n= 30] group .They were compared with respect to primary and secondary objectives ANALYSIS PLAN- Collected data were analysed using statistical package IBM SPSS version 16.

Result: Both groups were comparable with respect to demographic data , number of attempts, incidence of complications and hemodynamic response. Insertion of LMA supreme was significantly easy than I gel[p =0.038]

Conclusion: LMA-Supreme is safe and effective device which is easier to insert than I-GEL and causes less airway trauma.

Introduction:-

The major responsibility of the Anaesthesiologist is to provide adequate ventilation to thepatient. Tracheal intubation is the gold standard method to maintain patent airway during anesthesia.Laryngoscopyandendotrachealintubationproducereflexsympatheticstimulation,whichcouldleadtohypertension,tachycardia,myocardialischemia,ventriculararrhythmiasand increasedintracranialtension.

SupraglotticAirwayDevices[SADs]areincreasinglybeingusedasanexcellentalternative to mask ventilation and tracheal intubation with less complications.In this study twonewergenerationSADs- LMA SUPREME AND I-GEL are compared. In short laproscopicsurgeries ,2ndgeneration supraglottic airway devices are recommended as good and safealternativetointubation

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Aimsandobjective:-

Primary

WecomparedIgelandLMAsupremein shortlaproscopic surgeries under general anaesthesia withrespect toease andtimefor insertion ,the number ofattempts,sealpressureundergeneralanaesthesia

Secondary-

Tocomparehemodynamicchangesandpostofcomplicationslikesorethroat,bloodstainingofdevice,bronchospasm,laryngospasm.

Materialsandmethods:-

AnestheticMangagement

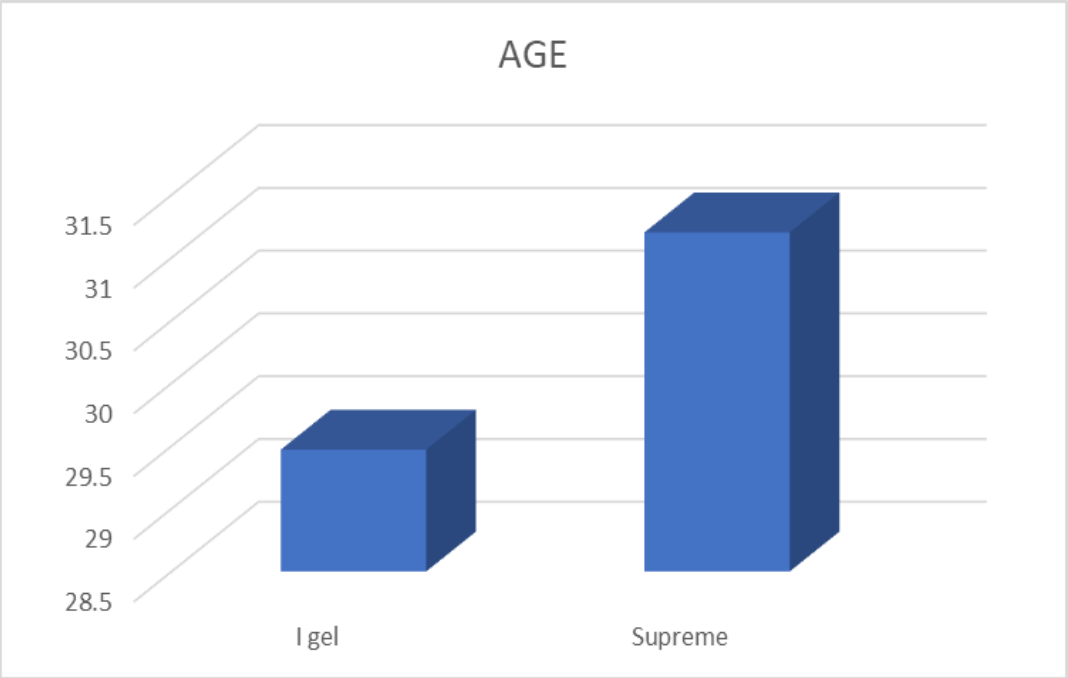
Ethical committee approvalPatientsatisfyinginclusioncriteriaInformedconsentobtainedRandomizationbyclosedenvelopemethodIGELgroup-SLMAgroupPremedication–inj.Glycopyrrolate0.2mgiv ,injmidaz1mgiv, inj. Emset 4mg iv given.HR, BP ,SPO2 MeasuredPreoxygenationfor3minInduction:inj.Propofol2mg/Kg ,injvecuronium0.1mg/KgPreinsertionBP,HRmeasuredInsertionMeasurementofoutcome:Easeofinsertion,Timetakenforinsertion,No.ofinsertionattempts,Haemodynamicresponse,Bloodstainingofdevices,IncidenceofcomplicationSurgeryprocededwithmaintenanceofAnaesthesiawithN2O/O2mixture2:1+sevoflurane1MAC AfterSurgerypatientreversedwithinj.Neostigmine50microgram/kg+inj.Glycopyrrolate8microgram/kgLMAremovedafteroralsuctioning

Statics

All quantitative data were compared using chi square test . p valuecalculatedforalltest.p value 0 to 0.01 was considered as 1% significant 0.011to0.05wasconsidered5%significant,greaterthan0.05considerdNotsignificat

Table 1:- Demographicprofile:age.

Group	N0:	Mean	SD	Pvalue
SUPREME	30	31.20	9.353	0.460
IGEL	30	29.47	8.681	Not significant



ObservationAndResult:-

Table 2:- DemographicProfileBMI.

Group	N0:	Mean	SD	Pvalue
SUPREME	30	21.54	2.0698	0.530
IGEL	30	21.25	1.4323	Notsignificant

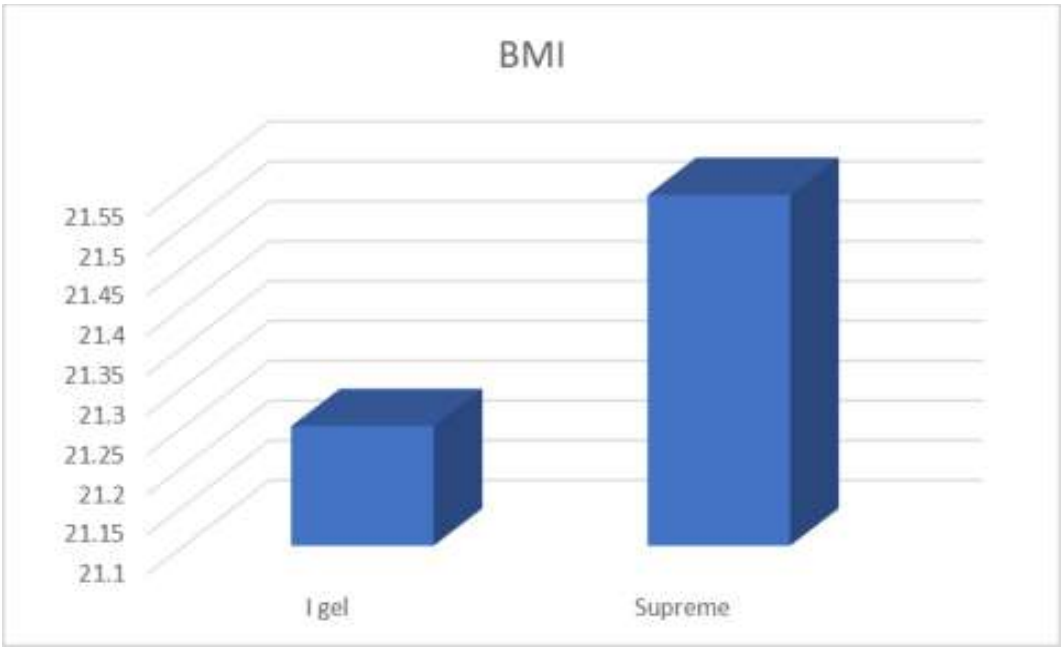


Table 3:- Easeofinsertion.

Group	NO;	Easy		Difficult		Pvalue
		NO	%	NO	%	P= 0.038
SUPREME	30	28	93.3	2	6.7	Significant
IGEL	30	22	73.3	8	26.7	

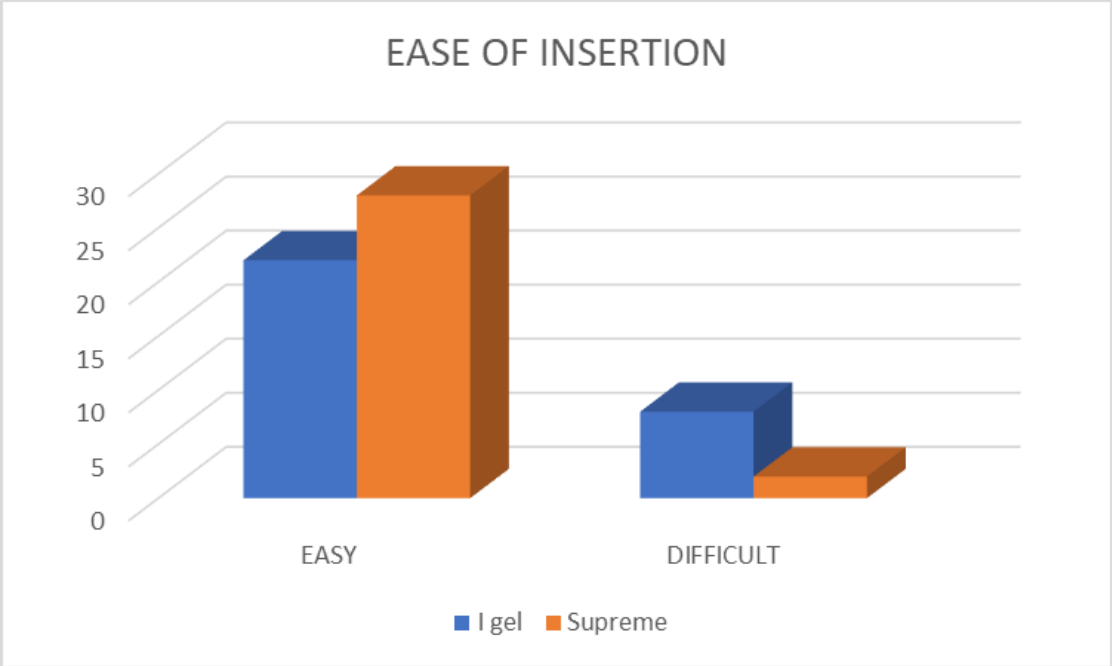


Table 4:- NumberofAttempts.

Group	No	Successin			PValue
		IstAttempT	IIndAttempt	IIIrdattempt	
SUPREME	30	28	2	-	P=0.12
IGEL	30	24	6		NONSIGNIFICANT

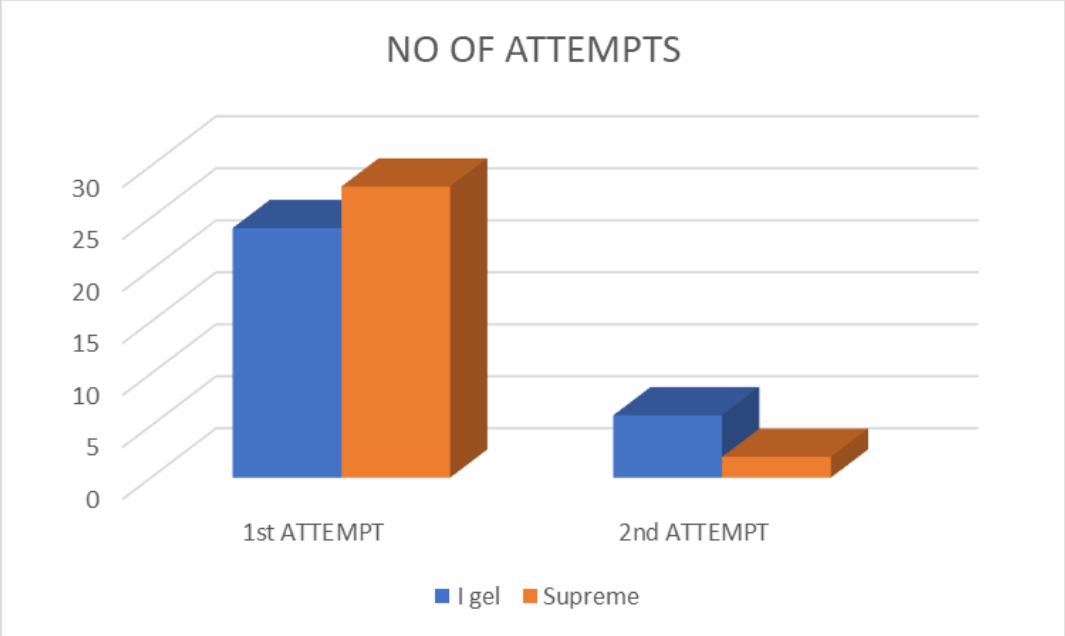


Table5:- Timetakenforinsertion.

Group	NO	Mean	SD	Pvalue
supreme	30	16.20	5.327	P=0.000
IGELLMA	30	25.20	5.162	Pvalue<.001

Table6:- Bloodstainingofdevices.

Group	No	BloodStaining		PValue
		Yes	No	

SUPREME	30	2	28	
				P=0.038 SIGNIFICAN
IGEL	30	8	22	T

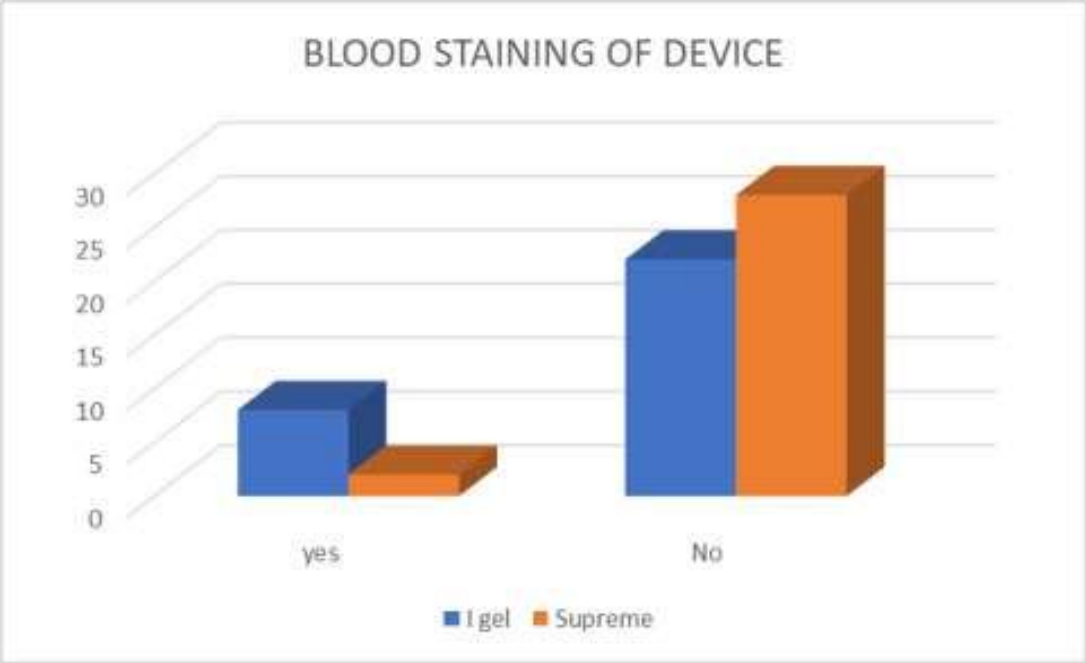
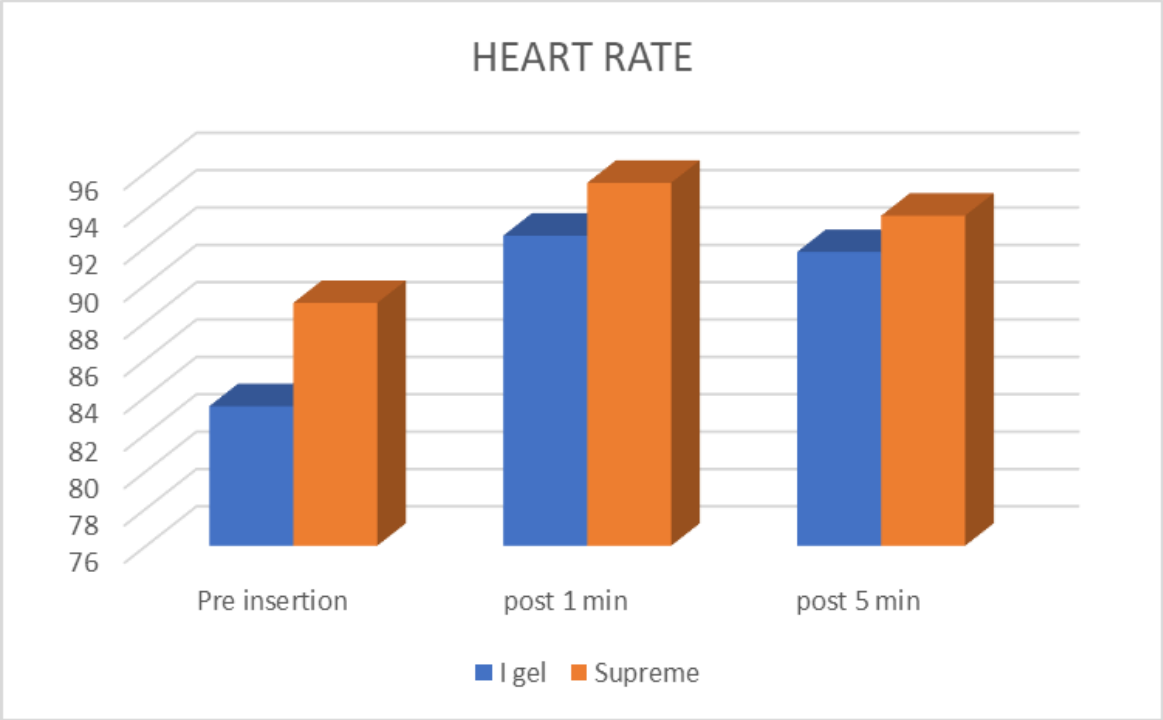


Table7:- HeartRate.

	Group	No	Mean	SD	PValue
Pre Insertion	SUPREME	30	89	10.252	P=0.073 Not Significant
	IGEL	30	83.47	13.038	
PostInsertionafter1min	SUPREME	30	95.43	10.311	P=0.353 NotSignificant
	IGEL	30	92.60	12.968	
PostInsertionafter5min	SUPREME	30	93.67	10.672	P=0.527 Not Significant
	IGEL	30	91.73	12.774	



	Group	No	Mean	SD	PValue
PreInsertion	supreme	30	94.27	8.702	P=0.906 NotSignificant
	IGEL	30	94.03	6.312	
PostInsertionafter1min	SUPREME	30	95.63	10.620	P=0.344 NotSignificant
	IGEL	30	92.80	12.310	
PostInsertionafter5min	SUPREME	30	90.67	12.347	P=0.419 Not Significant
	IGEL	30	93.23	12.054	

Results:-

1. Bothgroupswerecomparablewithrespecttodemographicdata,numberofattempts,hemodynamicresponseandinciden ceofcomplication.
2. InsertionofLMA supremewassignificantlyeasythanI-gel.

Discussion:-

AUTHOR	POPULATION	INTERVEN TION	OUTCOME	INFERENCE
Srivatsava, JindalP, RizviA,Sh armaJP	20-70agegroupundergoingelecti vesurgeries(ASAI/II)	InsertionofI-gel, SLIPA,LMA	Hemodynaicr esponse, ease ofinsertion	I–geliseffectiveinterms of lesshemodynamicchan gesandachieve properpositionforsupra glotticventilation.
Kimbrullet al	20-70agegroupundergoingl aproscopicsurgeries	Inser tion ofIge l,sup reme	Easeofinsertion Hemody namicres ponse	Botharesimilarinterm ofeaseofinsertion

Conclusion:-

LMAsupremeissafeandeffectivedevicewhichiseasiertoinsertthanIgelandcauseslessairwaytrauma.

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