DOI: https://doi.org/10.53350/pjmhs211561227

ORIGINAL ARTICLE

To Compare Frequency of Sore Throat in Early Postop period in General Anesthesia and Endotracheal Intubation for Abdominal Surgeries who are given Dexamethasone and Normal Saline

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ABSTRACT

Aim: To Compare frequency of sore throat in early post operative period among patients undergoing general anaesthesia and endotracheal intubation for abdominal surgeries who are given dexamethasone and normal saline.
Study Design: Randomized controlled study
Setting: Department of Anesthesia/ ICU, Sheikh Zayed Hospital, Lahore
Duration of study: Six months i.e. 25-09-2009 to 25-03-2010.
Methodology: 120 patients undergoing elective general surgery on abdomen were selected. They were divided into two groups. Group I received dexamethasone 8mg (2ml) I/V pre-operatively and group II received 2ml normal saline I/V pre-operatively. Chi square test was used. Visual analogue (VAS) scale was used for recording sore throat. The VAS score ≤4 was considered as no sore throat and VAS scores>4 were considered as the sore throat.
Results: Frequency of post-operative sore throat after the first 24 hours following GA and endotracheal intubation was lower in group (I) as compared to the control group (II). Eleven (20%) patients with dexamethasone had post-operative sore throat compared to thirty one (56.3%) patients in control group. (p<0.01).
Conclusion: Pre-operative use of dexamethasone was associated with decreased incidence of post-operative sore throat.
Keywords: Visual analogue scale (VAS), Post-operative sore throat, general anesthesia

INTRODUCTION

Post-operative sore throat is a very common complaint in patients receiving the general anaesthesia with endotracheal intubation. The reported incidence is up to 40%.[1] Incidence of sore throat was found to be increased with age, grade of difficulty in intubation, duration of surgery, and position of patient during surgery.[2] Sore throat is a predominant complaint when the surgical pain is well controlled, particularly by analgesia. Common measures to prevent the post-operative sore throat include the use of endotracheal tubes with low intra cuff pressure, and smaller sized endotracheal tubes.[3,4] During prolonged operations when nitrous oxide is used as an anaesthetic it gets absorbed into the endotracheal cuff and causes increased intra cuff pressure leading to ischemic injury to pharyngolaryngeal mucosa, and higher incidence of sore throat[5].

METHODOLOGY

This randomized control trial was conducted in the Department of anesthesiology / ICU, Sheikh Zayed Hospital Lahore. Sample size was 120 admitted patients undergoing general anaesthesia and endotracheal intubation for abdominal surgery. Non-probability purposive sampling technique was used. Elective surgery with general anesthesia and endotracheal intubation with ages 20 to 60 years and only ASA grade I and II were included. Patients H/O sore throat in last one week, BMI> 40, cardiac, respiratory, hepatic, or the major renal diseases, DM and H/O long term analgesics and corticosteroids were excluded.

Data Collection: After approval from local ethics committee, 120 patients including both genders were selected from surgical units of sheikh zayed hospital Lahore. Patients were divided into two groups of 60 patients each.

In group-II patients received normal saline 2ml I/V pre-operatively.

In group-I subjects were given dexamethasone (8mg) 2ml I/V before intubation pre-operatively. Intensity of pain was recorded after 24 hours of surgery using the visual analogue scale (VAS). The collected data was entered into the SPSS version 12. Chi- square test was applied to compare the sore throat between the two groups.

The objective of the study was to compare frequency of sore throat in early post operative period among patients undergoing general anaesthesia and endotracheal intubation for abdominal surgeries who are given dexamethasone and normal saline.

RESULTS

The detail of results is given in tables 1,2,3,4,5

Received on 28-02-2021
Accepted on 03-06-2021

Table 1: Frequency and %age of Sore Throat between Groups

Sore Throat	Study Groups	
	Group I	Group II
Yes	11(18.3%)	31(51.7%)
No	49(81.7%)	29(48.3%)
Total	60(100%)	60(100%)

Statistical analysis: P<0.05

Fig 1: Frequencies of sore throat between groups

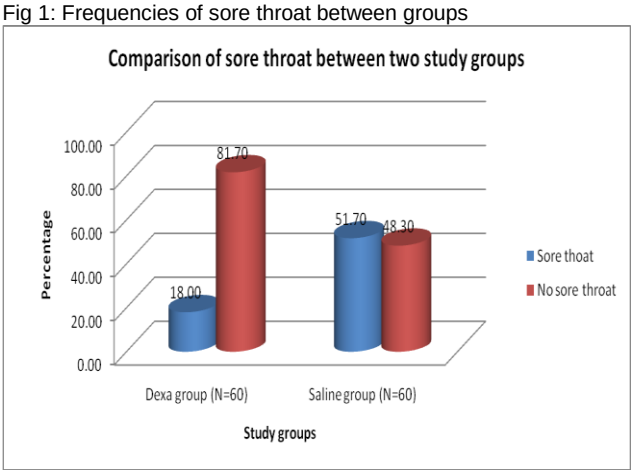

Table 2: Age distribution

Ages	Study Groups	
	Dexamethasone (I)	Normal Saline (II)
up to 25	9(15%)	9(15%)
26 to 50	41(68.3%)	40(66.7%)
> 50	10(16.7%)	11(18.3%)
Total	60(100%)	60(100%)

Statistical Analysis: (P<0.05)

Table 3: Gender status between two study groups

Gender	Study Groups	
	Dexamethasone (I)	Normal Saline (II)
Female	33(55%)	30(50%)
Male	27(45%)	30(50%)
Total	60(100%)	60(100%)

Statistical Analysis: (P>0.05)

Table 4: Gender Association with the Sore Throat

Sore Throat	Gender		Total
	Female	Male	
No	38(60.3%)	40(70.2%)	78(65%)
Yes	25(39.7%)	17(29.8%)	42(35%)
Total	63(100%)	57(100%)	120(100%)

Table 5: Association of ages with the sore throat

Ages	Sore Throat		Total
	No	Yes	
up to 25	13(16.7%)	5(11.9%)	18(15%)
26 to 50	49(62.8%)	32(76.2%)	81(67.5%)
>50	16(20.5%)	5(11.9%)	21(17.5%)
Total	78(100%)	42(100%)	120(100%)

Statistical Analysis: (P>0.05)

DISCUSSION

In this study, out of 60 subjects, Eleven (18.3%) patients with preoperative I/V dexamethasone dose had developed post-operative sore throat when comparing with control group i.e. 31(51.7%) patients and difference was highly significant statistically (p<0.01). Regarding age of the patients, all the patients in our study group were comparable. Wang et al[6] studied the effects of dexamethasone on post-operative sore throat in patients undergoing thyroidectomies and observed decreased incidence of post-operative sore throat in patients getting pre-operative dexamethasone.

CONCLUSION

Pre-operative use of dexamethasone was associated with decreased incidence of post-operative sore throat.
Conflict of interest: None

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