



EFFICACY OF SALINE IRRIGATION IN POST FESS PATIENTS

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ABSTRACT

Background: Functional endoscopic sinus surgery [FESS] is a very common surgery done in ENT practice. There are many modalities available for the management of post operative care in FESS patients. These modalities are antibiotics, antihistamines, cortico-steroids, mast cell stabilizers and topical saline irrigation.

AIM: The present study was done to evaluate the efficacy of nasal saline irrigation in post operative FESS patients.

Materials and Methods: Fifty(50) patients in the dept of ENT Govt Dharmapuri medical College Hospital are included in the study. These post FESS patients were advised isotonic normal saline irrigation in both nasal cavities from second to tenth post operative days and results evaluated.

Results: Out of 50 patients, 46 patients are benefited by the nasal saline irrigation from nasal discharge, nasal obstruction and pain.

Conclusion: Nasal saline irrigation is a simple and cost effective means to achieve symptoms relief in post operative FESS patients.

KEYWORDS :

Introduction:

Chronic Rhino Sinusitis (CRS) is an extremely common disorder and affects people living in developing as well as developed nations. Allergic Rhinitis is one of the important factors predisposing to chronic rhinosinusitis. Other factors predisposing to chronic rhinosinusitis are anatomical malformations, variations, polyposis and environmental insults. FESS is the gold standard surgery done for CRS, sinonasal polyposis, chronic allergic fungal sinusitis etc. Post operative wound healing in the FESS patients is crucial for the success of surgery. The main decisions regarding post operative care in FESS revolve around antibiotics, anti-inflammatory regimens, anti-allergy medications, topical decongestants, topical saline irrigation and suction clearance of debris. Use of nasal saline irrigation alone or as an adjunct to other medical therapies is an important post operative practice. Normal saline irrigation can be instrumental in mobilizing crust and blood clots, moisturizing biodegradable dressing and removing antigens which may contribute to post operative oedema. This study summarises evidence with regards to the efficacy of nasal saline in reducing symptoms in post operative FESS patients

MATERIALS AND METHODS

- (1) The study is conducted in the dept of ENT, gov. Dharmapuri Medical College Hospital, Dharmapuri during the period of 6 months [September 2016- February 2017] The number of patients the study are 50 in the 20-50 years age group.
- (2) These patients were advised to use 60 ml of isotonic normal saline using the squeeze bottle, to irrigate in both nasal cavities twice daily from the 2nd to 10th post operative days.
- (3) The outcome was assessed based on the questionnaire (a) nasal obstruction (b) nasal pain (c) improvement in the perception of smell (d) quality of sleep (e) nasal discharge.

RESULTS

- (1) In this study among 50 patients, 25 were diagnosed as CRS, 8 as allergic fungal sinusitis, 12 as bilateral sinonasal polyposis and 5 as antro-choanal polyp

Table:1

Diagnosis	Number of patients
CRS	25
Bilateral sino-nasal polyposis	12
Allergic fungal sinusitis	8
Antro-choanal polyp	5

- (2) After the use of saline irrigation in both nasal cavities for the period of 9 days, 46 patients had good improvement in nasal obstruction, nasal discharge and pain. Regarding the perception of smell sense, 40 patients showed good

improvement. Regarding quality of sleep, all the 50 patients had good quality of sleep.

Table:2

Symptoms	No: of patients had improvement	No: of patients had inconclusive relief	Total
Nasal obstruction	46	4	50
Nasal discharge	46	4	50
Nasal pain	46	4	50
Quality of sleep	50	0	50
Perception of smell	40	10	50

Discussion:

One of the major targets in the management of post operative FESS patients is to keep the inflamed nasal cavities clean, patent and well aerated. Nasal saline irrigation acts by fluidization and facilitating the clearing of thick mucus and crusts in post operative FESS patients. This simple procedure allows restoration of normal mucociliary function and also washes the debris. In addition to this it also helps by removal or reduction of inflammatory mediators. In our study, using normal saline irrigation had a significantly greater improvement in the post operative symptomatology score, which is correlated well with Pynnonen et al(2007) and Pinto et al(2006). Normal nasal saline irrigation are more effective in reducing nasal symptoms, Garavello et al(2005)

CONCLUSION

Topical saline irrigation in the postoperative FESS patients has got a definite beneficiary role in relieving symptoms pertaining to the nasal conditions.

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