Efficacy of budesonide nasal irrigation in comparison to normal saline nasal irrigation in post-operative management of endoscopic sinus surgery – a double blinded randomized control study

DEPARTMENT : Otorhinolaryngology

NAME OF CANDIDATE: Shameer Ahamed.H

DEGREE: M.S., (Otorhinolaryngology)

NAME OF GUIDE : Dr. Regi Thomas

BACKGROUND :

Nasal irrigation with normal saline and topical steroid spray form the mainstay of treatment in post endoscopic sinus surgery patients. However nasal sprays may not deliver optimum dosage of drug to the paranasal sinus mucosae. Budesonide nasal irrigation solves this problem by delivering drugs in a high volume high pressure system.

TRIAL DESIGN:

Double blinded randomized control trial.
METHODS:

88 patients were recruited and randomized into 2 groups of 44 each. One arm received normal saline nasal irrigation. The other arm received budesonide nasal irrigation (0.5mg in 200ml) twice daily. Both groups received steroid nasal spray as a part of standard care. Patients were followed up at 2 weeks post-op and 3 months post-op and on each visit SNOT 22 and Lund Kennedy Endoscopic scores were assessed.

RESULTS:

The mean scores in the first visit was SNOT22 : 30.98±2.93 vs 26.64±2.32 (p<0.0001) and LKES : 4.53±0.76 vs 4.08±0.78 (p=0.0034) in the saline and budesonide groups respectively.

The mean scores in the second visit was SNOT 22 : 17.63±4.92 vs 11.47±4.04 (p<0.0001) and LKES : 2.61±1.03 vs 1.50±1.01 (p<0.0001) in the saline and budesonide groups respectively.

Thus budesonide arm had statistically significantly better scores when compared to normal saline group.

CONCLUSION:

Budesonide nasal irrigation with positive pressure high volume device was found to have better efficacy when compared to normal saline irrigation. Budesonide nasal irrigation may be used in the post-operative management of endoscopic sinus surgery patients.