

ABSTRACT:

BACKGROUND: Recent times of the decade have seen great improvements in technology and its implication on mankind. As far as nose is concerned endoscopes and powered instruments keep doing wonders. The present study is one such kind where the powered instrument has been used to emphasize its efficacy. Inferior turbinate hypertrophy is the commonly encountered cause for nasal obstruction.

OBJECTIVES: The study was undertaken to compare three different techniques of inferior turbinate reduction surgery namely microdebrider assisted inferior turbinoplasty, conventional submucosal resection and submucosal diathermy which were done for the patients presenting with chronic nasal obstruction due to inferior turbinate hypertrophy refractory to medical treatment.

STUDY DESIGN: This was a Prospective study conducted at Government Kilpauk Medical College from December 2013 to September 2014. The patients were selected for the study group based on four point symptom scale, inferior turbinate hypertrophy grading (DNE) and mucociliary transit time (Saccharin test). Three visits of postoperative follow up were done on 1st week, 4th week and 12th week after surgery. Sixty patients presenting with nasal obstruction due to hypertrophied inferior turbinates refractory to medical treatment were included. Patients were randomly assigned to groups namely microdebrider

assisted turbinoplasty (n=20) , submucosal diathermy (n=20) , conventional submucosal resection (n=20).

RESULTS: The three methods showed significant difference in improvement of symptoms and ITH grading since the p value was <0.001. The mean values of four point symptom scale at the 3rd postop visit for the patients in MAIT study group are 5.60, 2.55 and 1.05, which gave the better results. Recurrence was common in patients of SMD study group. The mucociliary clearance time though improved quite well from preoperative values, they were not statistically significant when all methods here mentioned were compared.

CONCLUSION: MAIT is the technique of highest efficacy and least complication. SMD is the easiest technique done under local anaesthesia. SMRIT needs much more fine skilful hands. SMD consumed very less time in performing the surgery. Post-operative sequelae like crusting and synechiae, occur more in the SMRIT group.