

**Background:** Nasal obstruction is one of the common presenting symptoms encountered by otolaryngologists and it could be due to septal deviation or turbinate hypertrophy due to vasomotor or allergic rhinitis.

**Aim of the study:** This study was designed to evaluate the effectiveness and complications of submucosal diathermy on inferior turbinate hypertrophy, using electro-coagulation. The study carried out in Al-Yarmouk Teaching Hospital / ENT department from (February 2011 to January 2013).

**Patients & Methods:** After taking history from (100) patients who were complained from nasal obstruction, the state of mucosa, turbinates and septum were examined by (anterior rhinoscopy) and (rigid nasal endoscope) before and after applying local vasoconstrictor agent to the nose. Moderate to severe septal deviation were excluded from this study. Paranasal sinuses plain X-Ray films were done to exclude active rhinosinusitis. After laboratory investigations, and under (GA) with oral endotracheal intubation and throat pack with the aid of headlight, submucosal diathermy of inferior turbinate was done. After completion, each nostril was packed with Paraffin Pack, which was removed (24 hours) post operatively.

**Results :** (100) patients were included in our study, (56 %) males and (44 %) females. All of them were complaining from nasal obstruction. The subjective improvement in nasal obstruction at (two months) post-operatively was (72 %) with great improvement, (8 %) with partial improvement, and (20 %) for no change. The subjective evaluation of nasal obstruction (one year) post-operatively, revealed symptoms-free for (84 %), partial improvement for (12 %), and patients with no change represent (4%).

**Conclusion:** Submucosal diathermy is an effective method for decreasing the size of the inferior turbinates . It does not require expensive instrumentation and is a safe, effective procedure for improving nasal breathing in patients with inferior turbinates hypertrophy , but it had no role in alleviating the symptoms of allergic rhinitis or vasomotor rhinitis , like (rhinorrhoea , sneezing) other than nasal obstruction.