The Role of Endoscopic Transnasal Microwave Ablation in Otorhinolgic Procedures: An Alternative to conventional coagulation modalities.

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Abstract (300 word limit)

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Objective: Otorlaryngologist have long employed thermal ablation and coagulation modalities such as, radiofrequency ablation and diathermy cautery to manage soft tissue hypertrophy. Microwave ablation (MWA) has recently become a popular thermal modality for minimally invasive procedures due to faster ablation times, larger ablation volumes, and effectiveness in many tissue types. This study presents a retrospective review of patients undergoing transnasal endoscopic procedures utilizing microwave ablation.

Methods: Retrospective chart review comparing surgical technique and short-term outcomes in patients undergoing endoscopic trannasal microwave ablation at a academic affiliated multi-specialty practice between January 1st 2019 to January 1st 2020.

Results: 12 patients underwent transnasal endoscopic ablation utilizing the NuWave PR microwave ablation probe. 8 patients underwent submucosal turbinate reduction. 2 patients underwent polypectomies, 2 patients underwent adenoidectomies. Mean follow up was 14 weeks.

Conclusion: Endoscopic transnasal procedures utilizing microwave ablation is feasible and offers several advantages over traditional coagulation modalities including speed of procedure, speed of recovery.

Recent Publications (minimum 5)

1. Ali Abd Allah Abd El Rahman, Ayman Abd El Aziz El Shehaly, Yehia M Dawood, et al. Comparative study between radiofrequency coblation and traditional adenoidectomy. Al-Azhar Assiut Medical Journal 2018 16:211-218
2. Atilla MH, Kaytez SK, Kesici GG, Bas¸timur S, Tuncer S. Comparison between curettage adenoidec-tomy and endoscopic-assisted microdebrider adenoidectomy in terms of Eustachian tube dysfunction. Braz J Otorhinolaryngol. 2018.
3. C.J. Skilbeck, D.J. Tweedie, A.R. Lloyd-Thomas, D.M. Albert, Suction diathermy for adenoidectomy: Complications and risk of recurrence, International Journal of Pediatric Otorhinolaryngology, Volume 71, Issue 6, 2007, Pages 917-920
4. Lakeisha R. Henry, Thomas J. Gal, Eric A. Mair, Does Increased Electrocautery During Adenoidectomy Lead to Neck Pain?, Otolaryngology - Head and Neck Surgery, Volume 133, Issue 4, 2005, Pages 556-561.
5. James Clemens, J.Scott McMurray, J.Paul Willging, Electrocautery versus curette adenoidectomy: comparison of postoperative results, International Journal of Pediatric Otorhinolaryngology, Volume 43, Issue 2, 1998, Pages 115-122

Photograph



Biography (150 word limit)

Marc Dean is a board-certified otolaryngologist, who graduated from Baylor University with a bioinformatics, and went on to graduate from Texas Tech Health Science Center with a degree in medicine. He completed his residency at Louisiana State University Health Science Center in Shreveport, as well as his fellowship in Otorhinology under Gale Gardner and Fred Stucker. He currently practices in Fort Worth, Texas, focusing on both otologic and rhinologic disorders. He also serves as chairman of Vitruvio institute of Medical Advancement (VIMA), a nonprofit research institute, as well as assistant clinical professor at Texas Tech University Health Science Center.

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