

September 23, 2021
Webinar

Journal of Universal Surgery Volume: 09

Case Review of Endonasal Approach for Spreader Graft

Eulogio Emílio Martinez Neto

ORLA clinic, Brazil

This is a case review of a primary nasal valve dysfunction corrected using an endonasal approach by a transfixion incision.

Due to the increasing understanding and manipulation of the nasal dorsum on aesthetic approaches, it is common to solve and predict valve disorders with the dorsum exposed and the lateral cartilages separated from the nasal septum.

The aim is to consider this less aggressive endonasal approach in selected cases.

Our patient had no aesthetic complaints or aesthetic changing desires and had an external valve collapse during nasal inspiration.

After surgery we noticed the correction of the inspiration collapse, with little aesthetic changes and satisfaction of the patient.

Key Words:

Nasal valve, spreader graft, endonasal, rhinoplasty

Introduction

There are some situations in the nasal study, where the function and the aesthetics of the nose come together and it seems impossible to separate them in our surgical plan. Due to the comprehension and technical refinement achieved by rhinology on the last decades, the use of grafts and visualization of nasal structures is done routinely with an acceptable prevision of results. Even then, the philosophy that sometimes less is best should always be at least remembered. Nasal valve dysfunction is commonly solved with lateral and dorsum grafts. The access of these areas is usually done with the dissection of the dorsum in open or closed approach and incisions of lateral cartilages for insertion and fixation of the grafts. It is possible to solve some cases with no need of such dissection, using septal bilateral submucosal tunnels to position grafts that will prevent nasal collapse during inspiration.

Objective

To demonstrate a case of surgical treatment of nasal valve dysfunction using an endonasal approach technique.



Preoperative Picture Showing Supra Alar Crease Dysfunction



Submucosal Tunnel Dissection

Preoperative Picture Showing Supra Alar Crease Dysfunction
Preoperative Picture Showing Supra Alar Crease Dysfunction

Methods

A 29 years old male patient came to us at ORLA Clinic , Florianópolis, SC Brazil, with a complaint of nasal obstruction worse during forced inspiration during exercise activities. He had mild aesthetic dissatisfaction. During the medical appointment, with palpation and nasal flow dynamics evaluation, it was noticed and tested with handmade cotton cylinders approximately 2,5mm thick, placed bilaterally on the roof of the nose, that the lateral cartilage wouldn't collapse with this inner angle extended.

The surgical plan was to use a transfixion incision and during septoplasty shape two equal cartilage rectangular grafts of approximate 2cm of length and 0.5cm of height. Perform a submucosal tunnel on the opposite side of the deviation (this side already dissected) and insert the grafts widening the roof and its angulations with the lateral cartilage. Once the grafts were in place, underneath the lower edge of the graft, a "U" suture from the vestibule, transfixing the mucosa bilaterally parallel to the nasal floor was performed using an absorbable monocryl 4.0 thread to support the grafts and not allowing them to slide. The same thread was used to close the transfixion incisions.

Results

One year after the surgical procedure, the patient is free of complaints and satisfied with the functional and aesthetic results. It is possible to palpate the grafts in the office from above the mucosa and notice that they remain in place and thick.



Placement of Graft



Graft Fixation Support Suture



One Year Post Operative Picture

Conclusion

The endonasal spreader graft technique can be very useful in nasal valve dysfunction. It does not require large dissections of the nose, is not aggressive and can be maintained in place with a septal suture done with absorbable thread. It can also be considered in rhinoplasties where the dorsal correction won't require an opening of the nasal roof.

Biography:

DR. EULÓGIO EMÍLIO MARTINEZ NETO

Otorhinolaryngologist at ORLA Clinic in Florianópolis Brazil

Fellow in Facial Plastic Surgery and Rhinology at Fellipu Institute by the Brazilian Society of Otorhinolaryngology

Master's degree in Rhinology and Facial Plastic Surgery from the School of Medicine of Santa Casa de São Paulo

Fellow in Endoscopic Face Sinus Surgery at Pittsburgh University, Pennsylvania

Fellow in Endoscopic Paranasal Sinus Surgery and Skull Base Miami University

Rhinoplasty Improvement Course in Portland, Oregon

Member of the Brazilian Academy of Plastic Surgery and Face Reconstruction

Member of the Brazilian Association of Otorhinolaryngology and Cervicofacial Surgery

Brazilian Academy of Rhinology

International Federation of Facial Plastic Surgery Society