

Functional Nasal Surgery

Management of Nasal valve collapse



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➤ No Disclosures

Functional Nasal Surgery

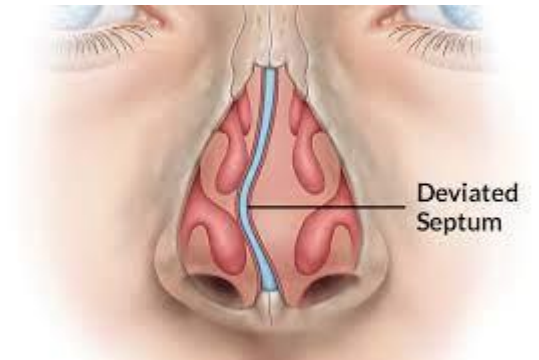
Management of Nasal valve collapse

- OBJECTIVES:
- Nasal valve collapse- anatomy
- Diagnosis
- Treatment options- endonasal approach

Functional Nasal Surgery

Management of Nasal valve collapse

- **Common causes of nasal obstruction:**
- Deviated nasal septum
- Hypertrophic inferior turbinates
- Nasal valve collapse



Nasal valve- anatomy

➤ Internal nasal valve

Defined by the angle between nasal septum and ULC (10 to 15 degrees)

Superior: caudal end of ULC and septum

Posterior/inferior: Head of inferior turbinate

Lateral: Pyriform aperture and fibrofatty tissue

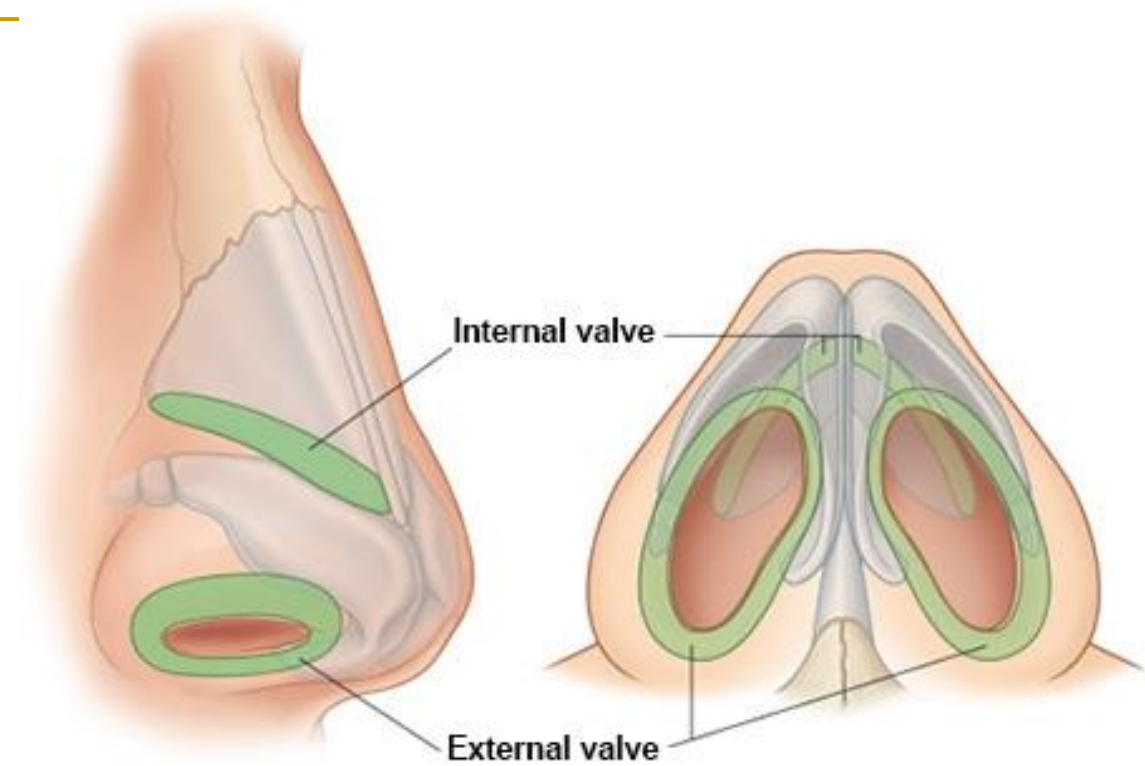
➤ External nasal valve

Located in the nasal vestibule

Medial: Septum and medial crura

Anterolateral: Alar cartilage and fibrofatty tissue

Inferior: Nasal Sill



Management of Nasal valve collapse

DIAGNOSIS

➤ HISTORY

➤ EXAM

➤ NOSE SCORE



Modified Cottle maneuver

ID# _____ Date _____

Nasal Obstructive Symptoms Evaluation Scale

➔ To the Patient: Please help us to better understand the impact of nasal obstruction on your quality of life by completing the following survey. Thank you!

Over the past 1 month, how much of a problem were the following conditions for you?

Please Circle the Most Correct Response

	Not a Problem	Very Mild Problem	Moderate Problem	Fairly Bad Problem	Severe Problem
1. Nasal congestion or stuffiness	0	1	2	3	4
2. Nasal blockage or obstruction	0	1	2	3	4
3. Trouble breathing through my nose	0	1	2	3	4
4. Trouble sleeping	0	1	2	3	4
5. Unable to get enough air through my nose during exercise or exertion	0	1	2	3	4

6. Please mark on this line how troublesome is your difficulty in breathing through your nose:

None | Medium | Severe

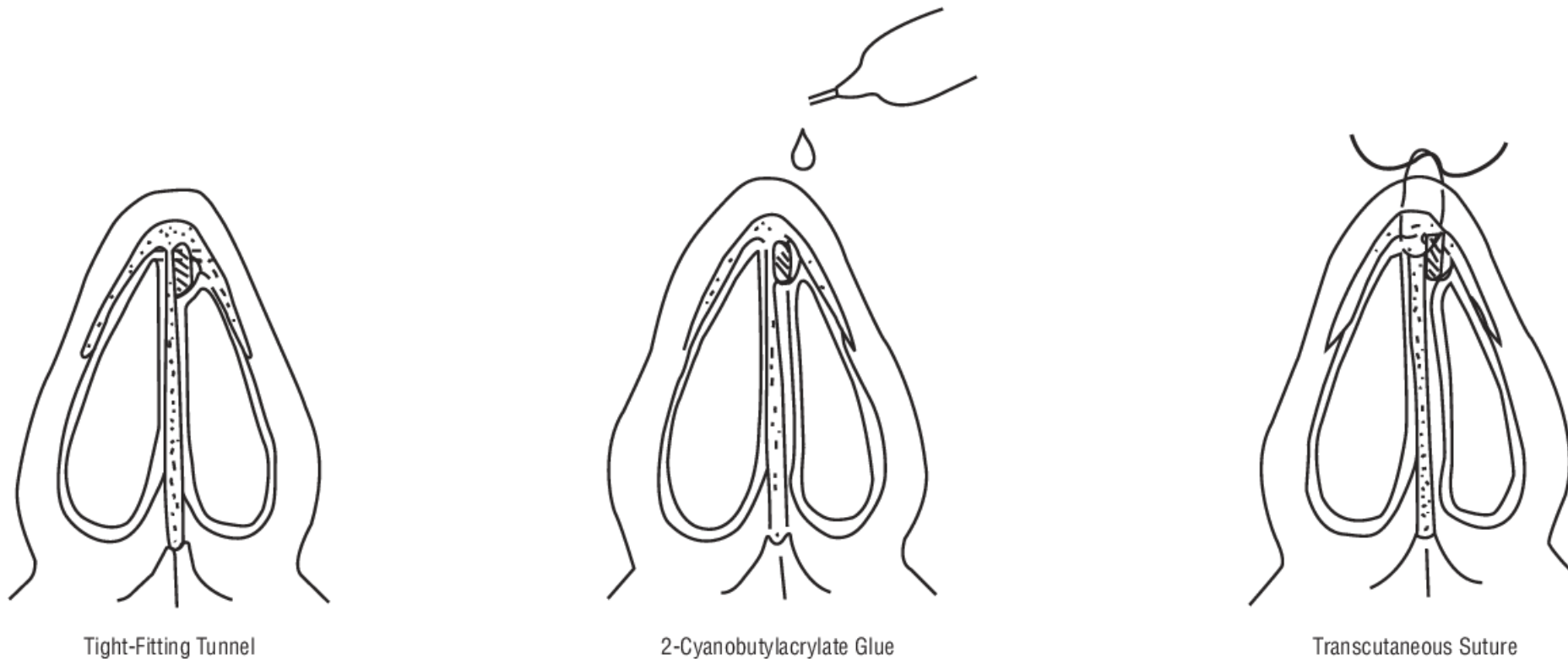
Management of Nasal valve collapse

- Absorbable lateral nasal sidewall implant- Latera
- Radiofrequency ablation of the lateral sidewall
- Open vs Endonasal approach
- -Spreader graft
- -Alar Batten Graft
- -Lateral crural strut graft
- -Alar rim graft



Management of nasal valve collapse- Endonasal approach

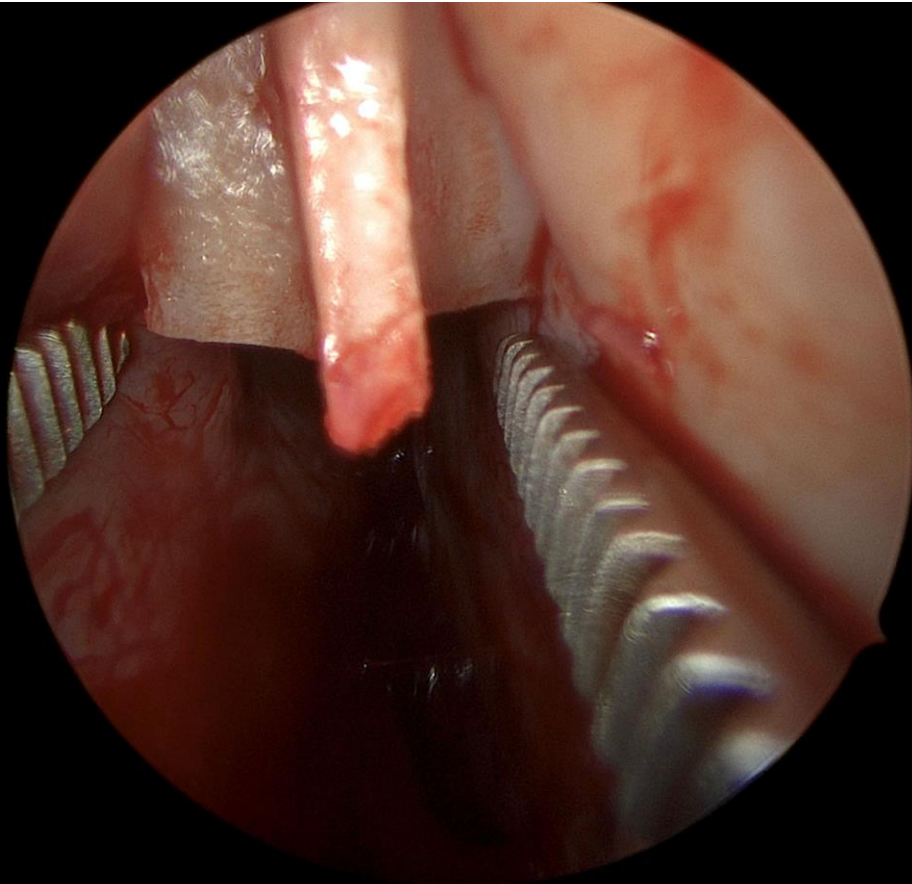
Endonasal spreader graft placement as treatment for internal nasal valve insufficiency: no need to divide the upper lateral cartilages from the septum. R. Andre, S.Paun, H. Vuyk. 2004. [Archives of facial plastic surgery](#)



MANAGEMENT OF NASAL VALVE COLLAPSE

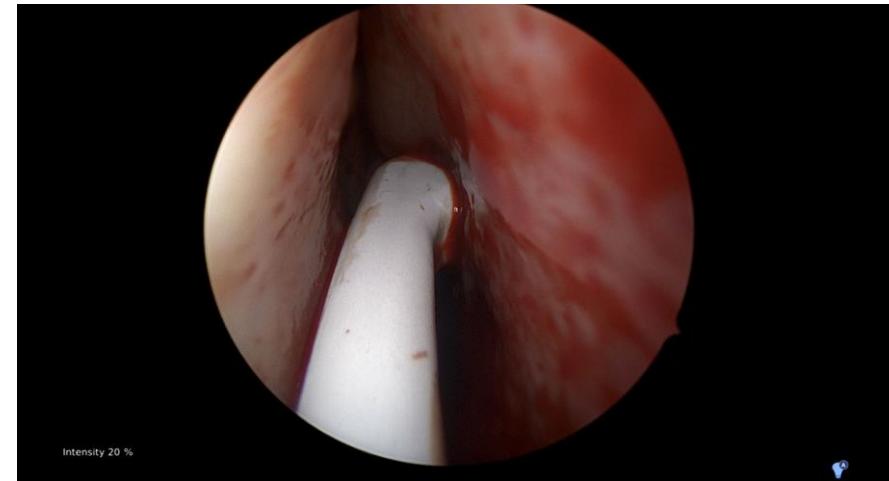
-INTERNAL NASAL VALVE/ENDONASAL APPROACH

DORSAL STRUT WITH ADJACENT SPREADER GRAFTS



Intensity 20 %

APPROXIMATING NASOSEPTAL FLAPS INFERIOR TO PLACEMENT OF SPREADER GRAFTS

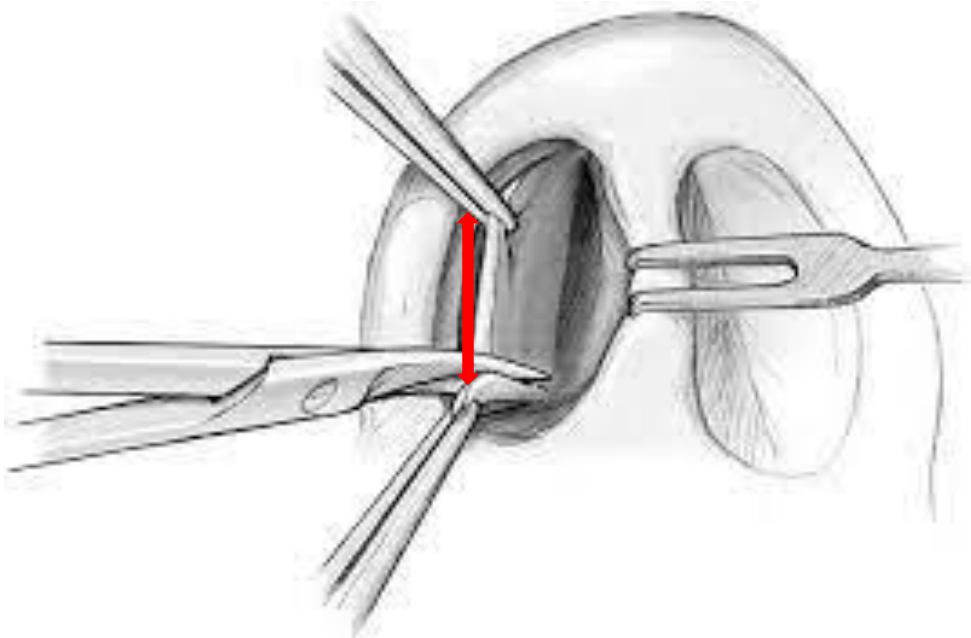


Intensity 20 %

Management of Nasal valve collapse

-Repair of External Nasal Valve Collapse

Modified J-Flap

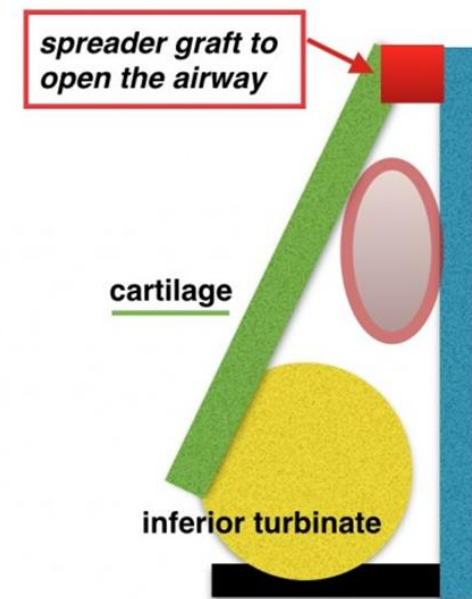
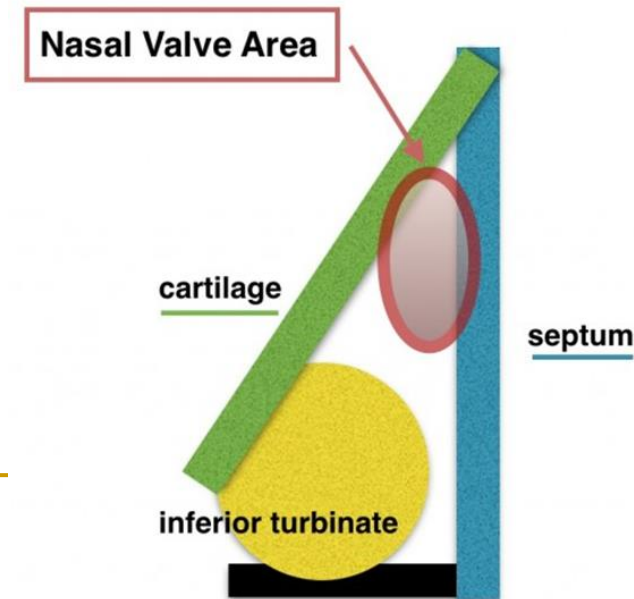


Alar Rim Graft



Management of Nasal Valve Collapse

- Ongoing study:
- 75 patients undergone endonasal approach to repair of internal and external nasal valve collapse
- Selection Criteria
- Preop NOSE SCORE: 50 to 100
- Ages: 25 to 70
- Postop NOSE SCORE at 6 months
- 0 to 5 in 90% of patients
- 5 to 10 in 5 % of patients
- >10 in 5% of patients



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- Conclusion:
- Endonasal approach to repair of nasal valve collapse is a safe and effective approach for a comprehensive otolaryngologist