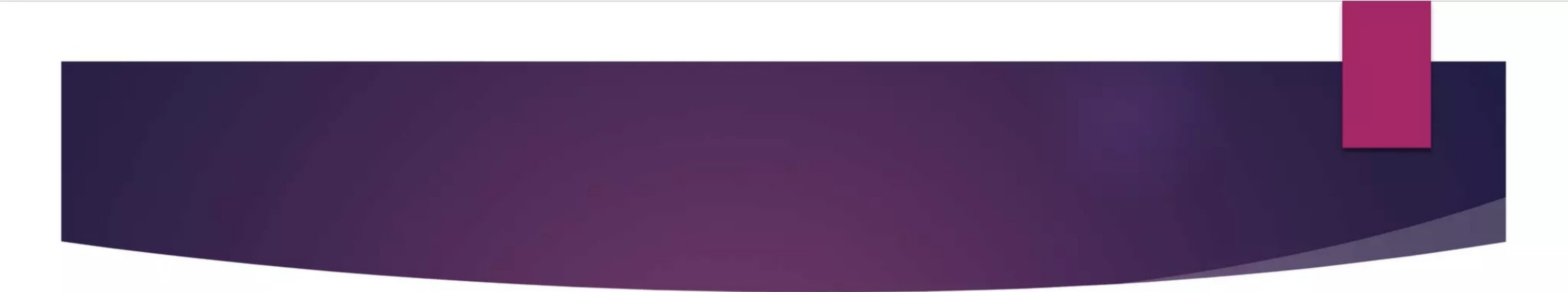
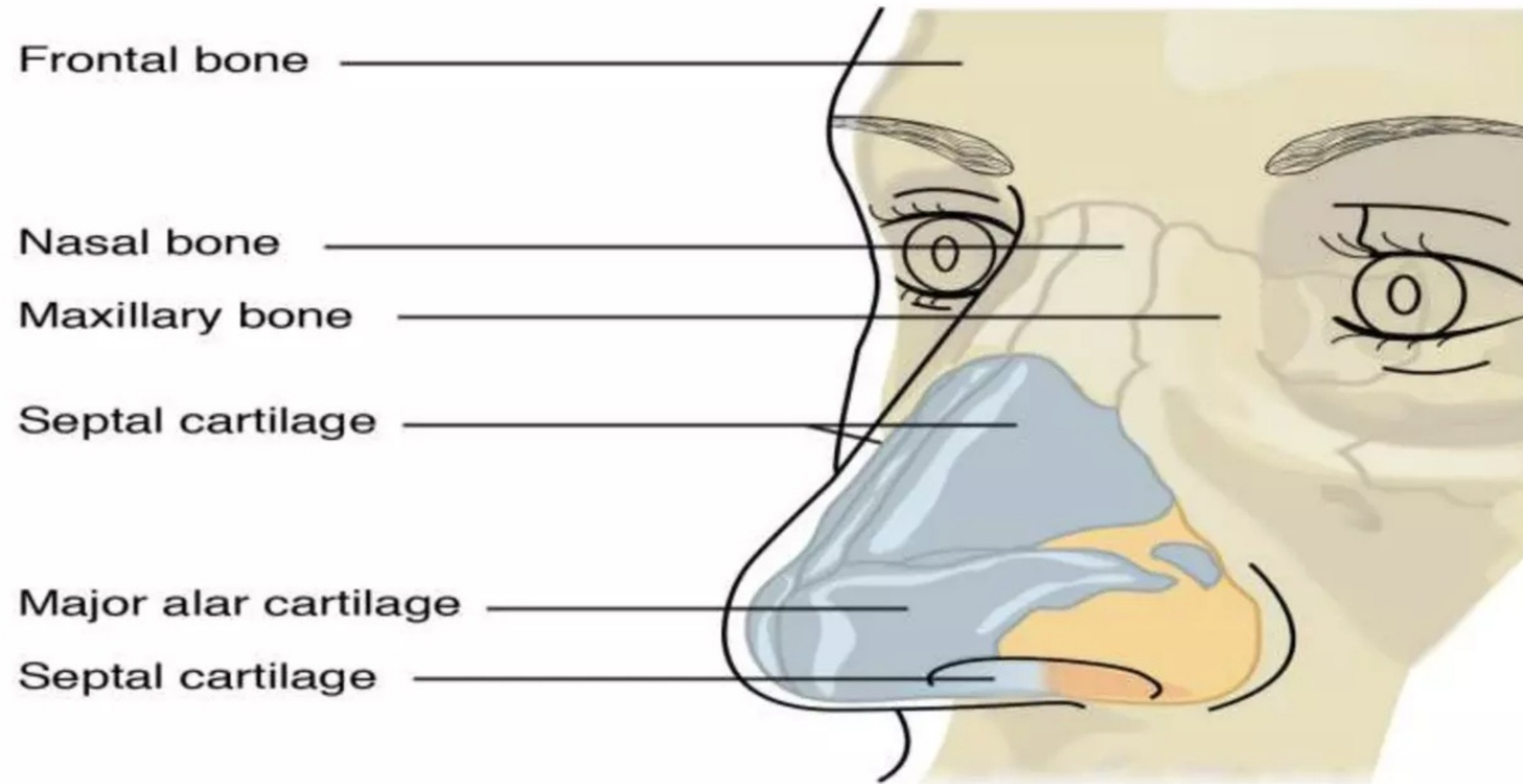
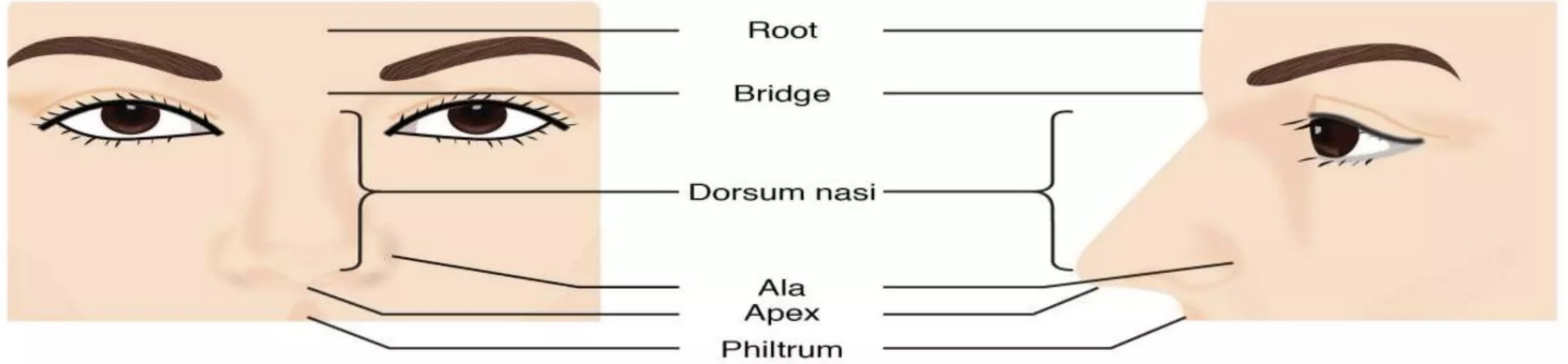


Physical Examination of Nose

DR.AMRO AL-AMLEH

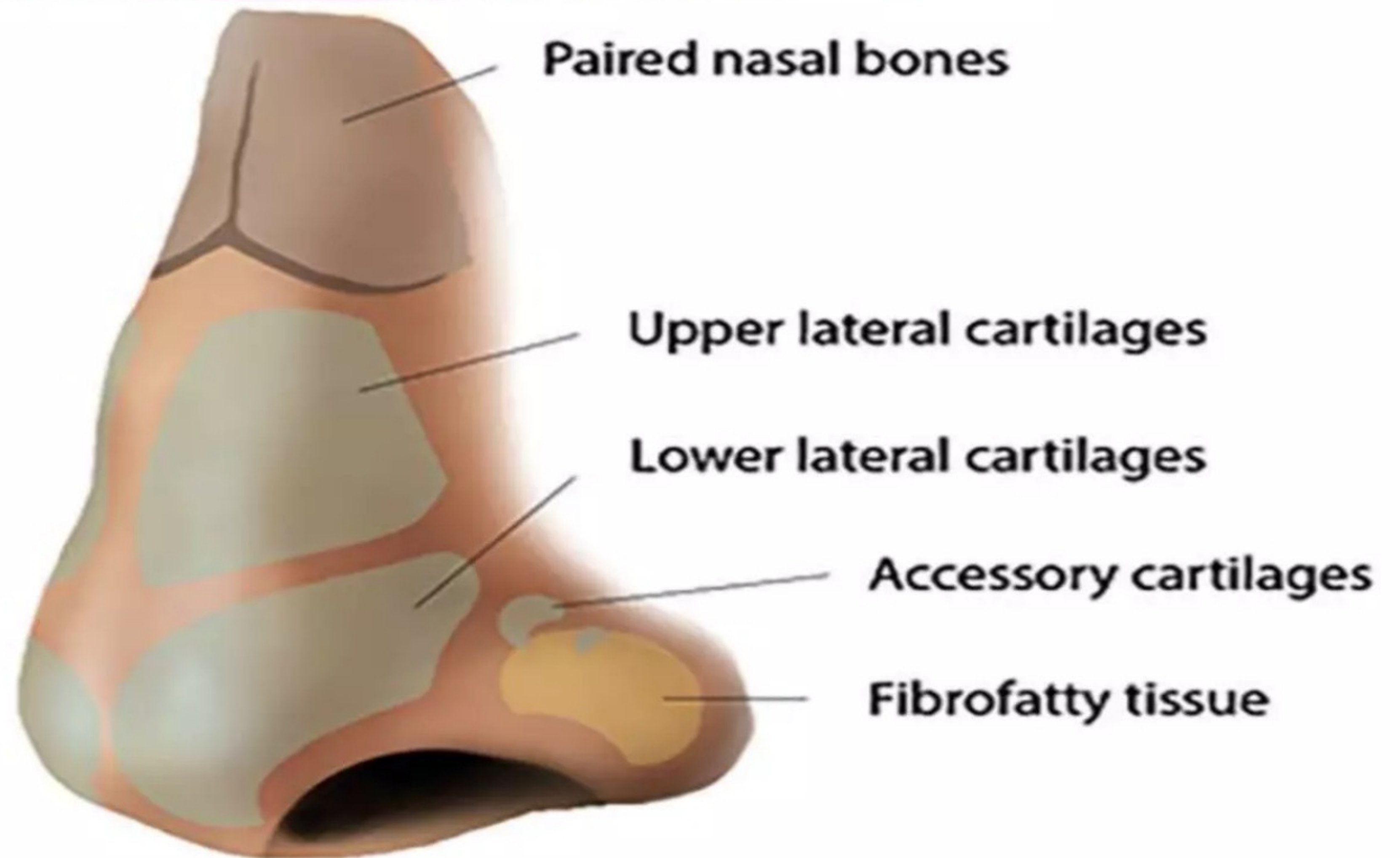
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- 
- ▶ Physical examination :-
 - ▶ External nose
 - ▶ Vestibule
 - ▶ Anterior rhinoscopy
 - ▶ Posterior rhinoscopy
 - ▶ Functional examination of nose



External Nose

- ▶ Inspection and palpation for
 - ▶ Skin lesions
 - ▶ Osteocartilaginous framework (nasal bones and alar cartilages) deformities.



Inspection

▶ Skin

- ▶ Signs of inflammation → Cellulitis
- ▶ Skin injuries
- ▶ Scars: Operation or trauma
- ▶ Swelling and cysts (dermoid, glioma, sebaceous cyst)
- ▶ Sinus: Congenital dermoid
- ▶ Ulcer/neoplasm: Rhinophyma, basal cell/squamous cell carcinoma or melanoma, Herpes simplex/zoster

▶ Osteocartilaginous framework

- ▶ Saddle nose
- ▶ Hump nose
- ▶ Crooked or deviated nose
- ▶ Enlargement of bony skeleton: Paget's disease or fibro-osseous dysplasia
- ▶ Cartilaginous enlargement: Chondroma or chondrosarcoma

Palpation

- ▶ Tenderness
- ▶ Fluctuation
- ▶ Crepitation (fracture)



cellulitis

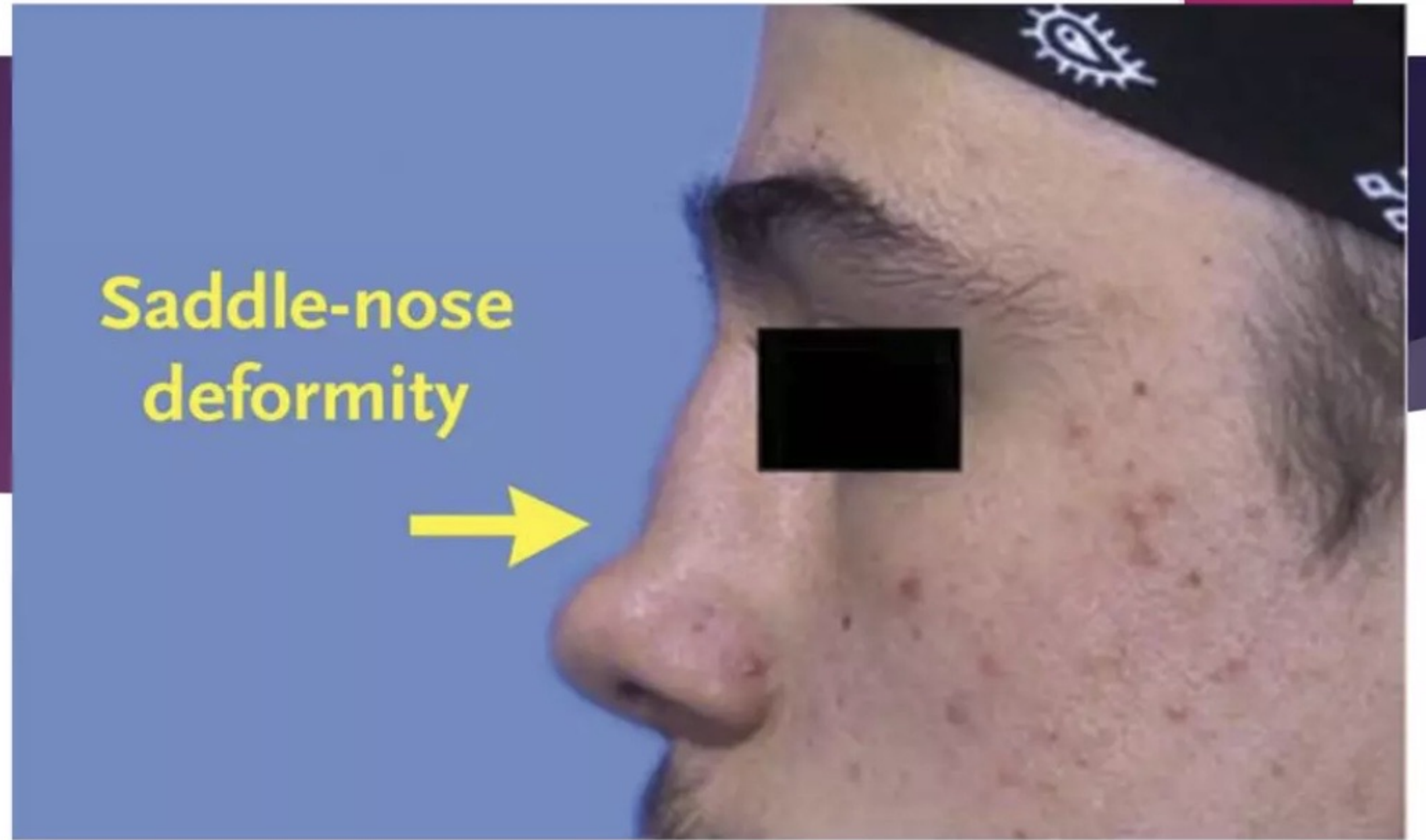


A close-up photograph of a person's nose, focusing on the bridge. A small, dark, circular opening is visible on the skin, which is a characteristic sign of a dermoid sinus cyst. The skin is light-colored and shows some texture. The background is blurred, showing parts of the face and hair.

NASAL DERMOID SINUS CYST




Saddle-nose deformity



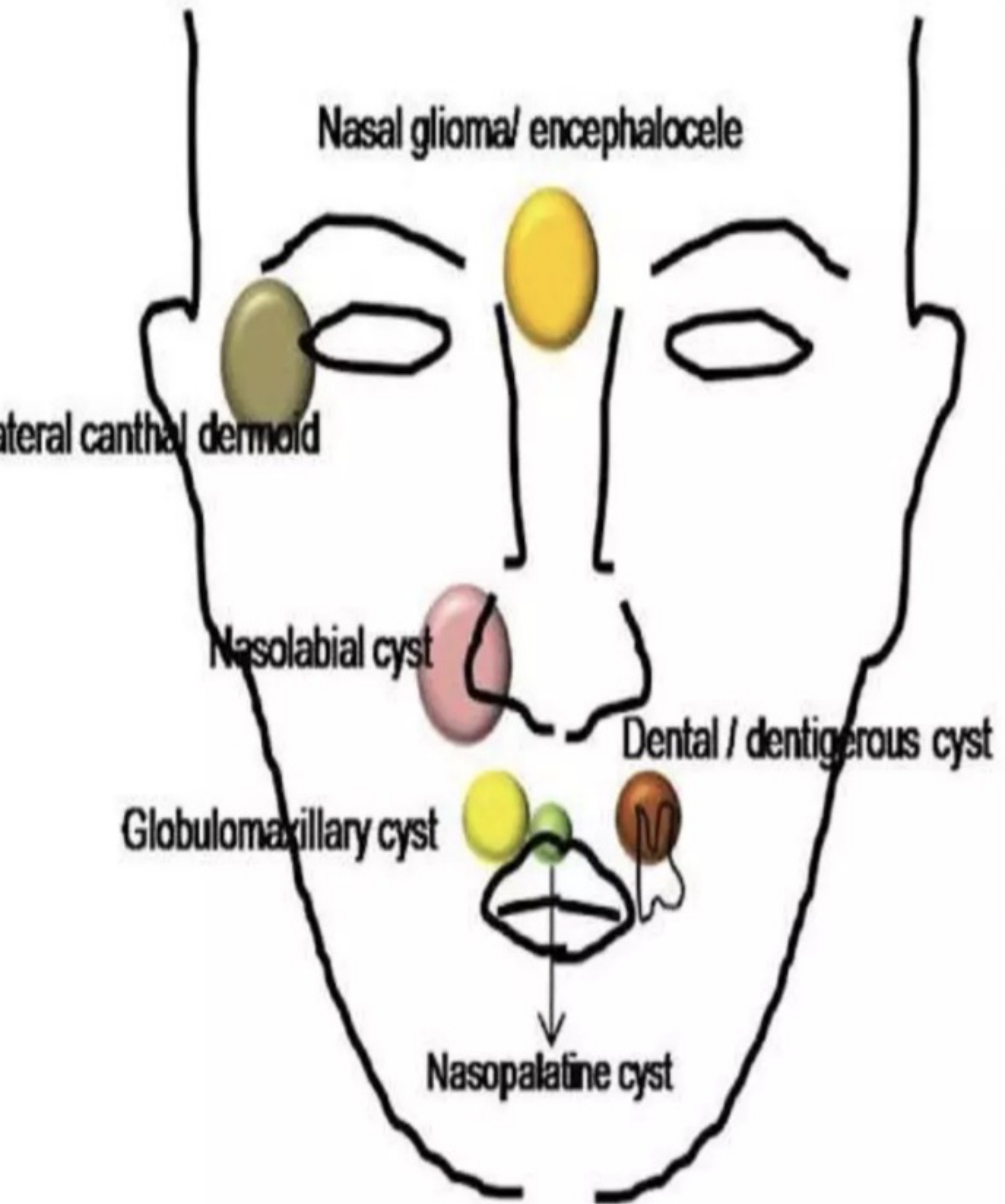
Nasal vestibule

- ▶ Vestibule is an anterior skin lined part of nasal cavity having vibrissae (hairs in nasal vestibule). It can be easily evaluated by lifting the tip of nose.

- 
- ▶ **Metaplasia** → whitish dry areas.
 - ▶ Caudal septal Ulcerations and perforation
 - ▶ Caudal deflection of septum
 - ▶ **Furuncle** or fissures : Vestibular examination becomes painful.
 - ▶ **Papilloma**: It is usually pedunculated.
 - ▶ **Cyst**: Nasolabial cyst







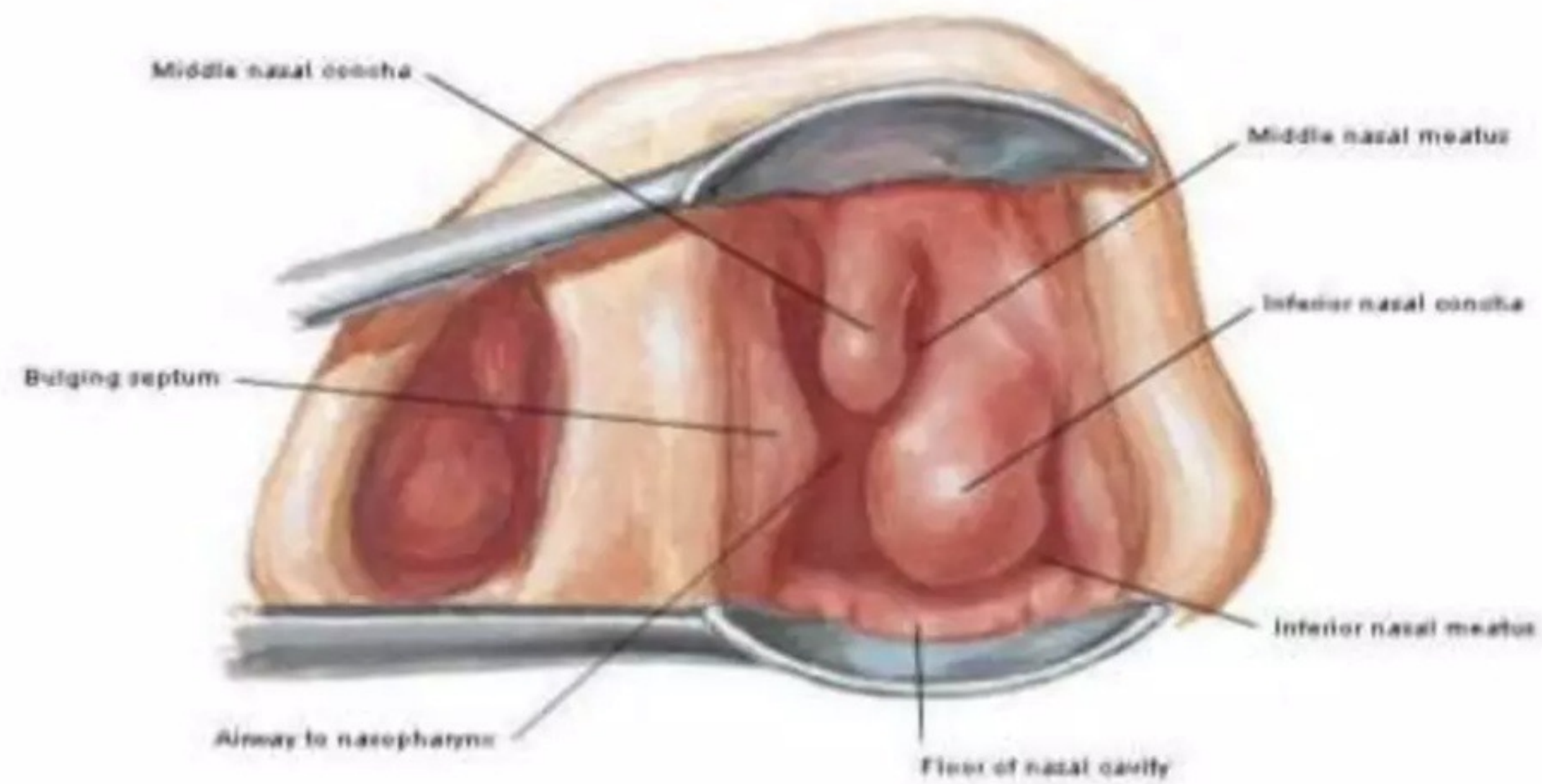
Nasolabial Cyst

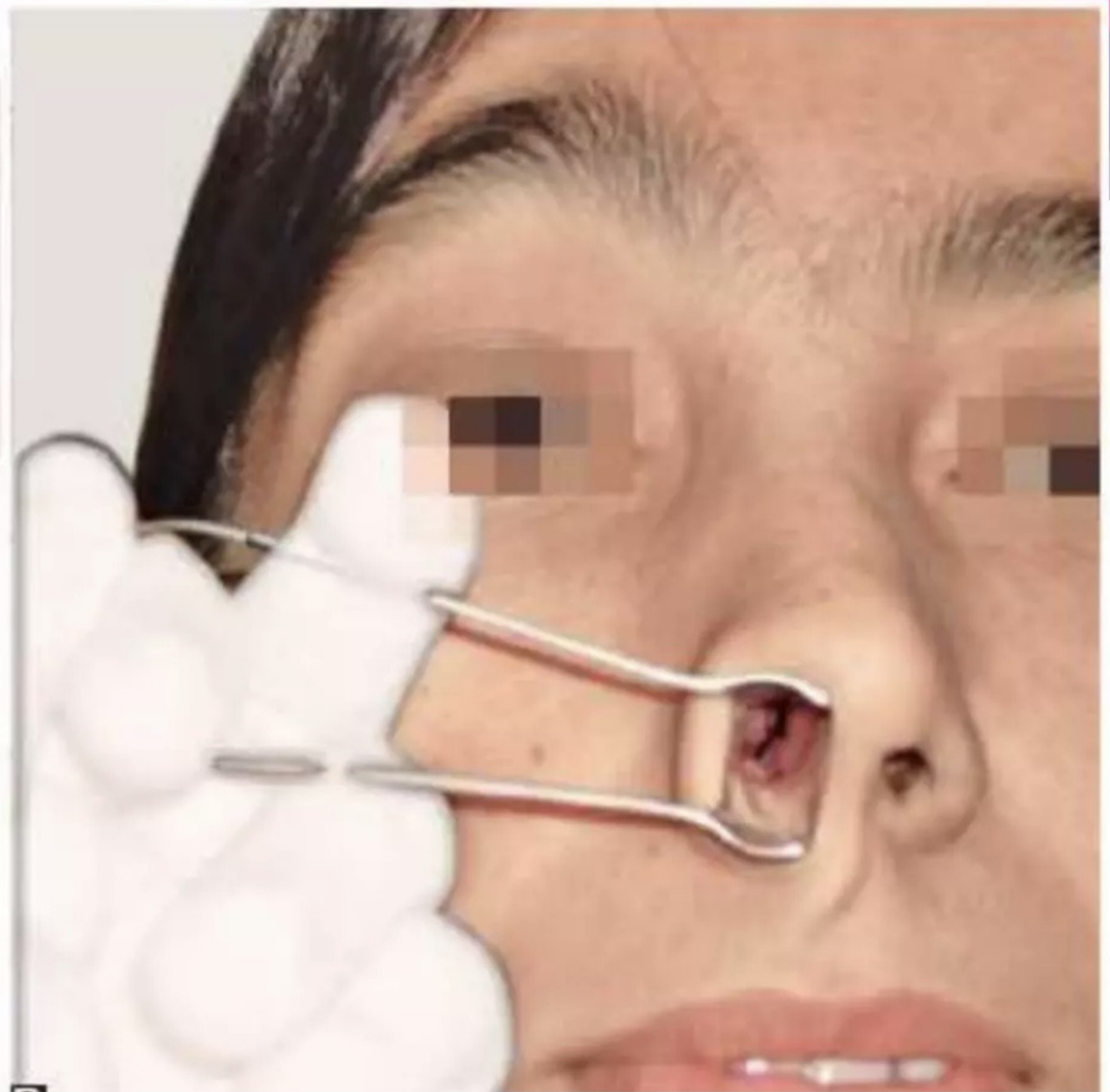
Anterior Rhinoscopy (Examination of Nasal Cavity)

- ▶ The blades of speculum are inserted into the less sensitive skin line vestibule and should not touch the septal mucosa which is very sensitive and vascular.
- ▶ The nasal speculum is closed while introducing and opened during examination and remains partially open when removing from the nose (avoid picking vibrissae).
- ▶ The size of the nasal speculum should be chosen according to the age of patient and size of the nose.



Anterior rhinoscopy





Anterior rhinoscopy

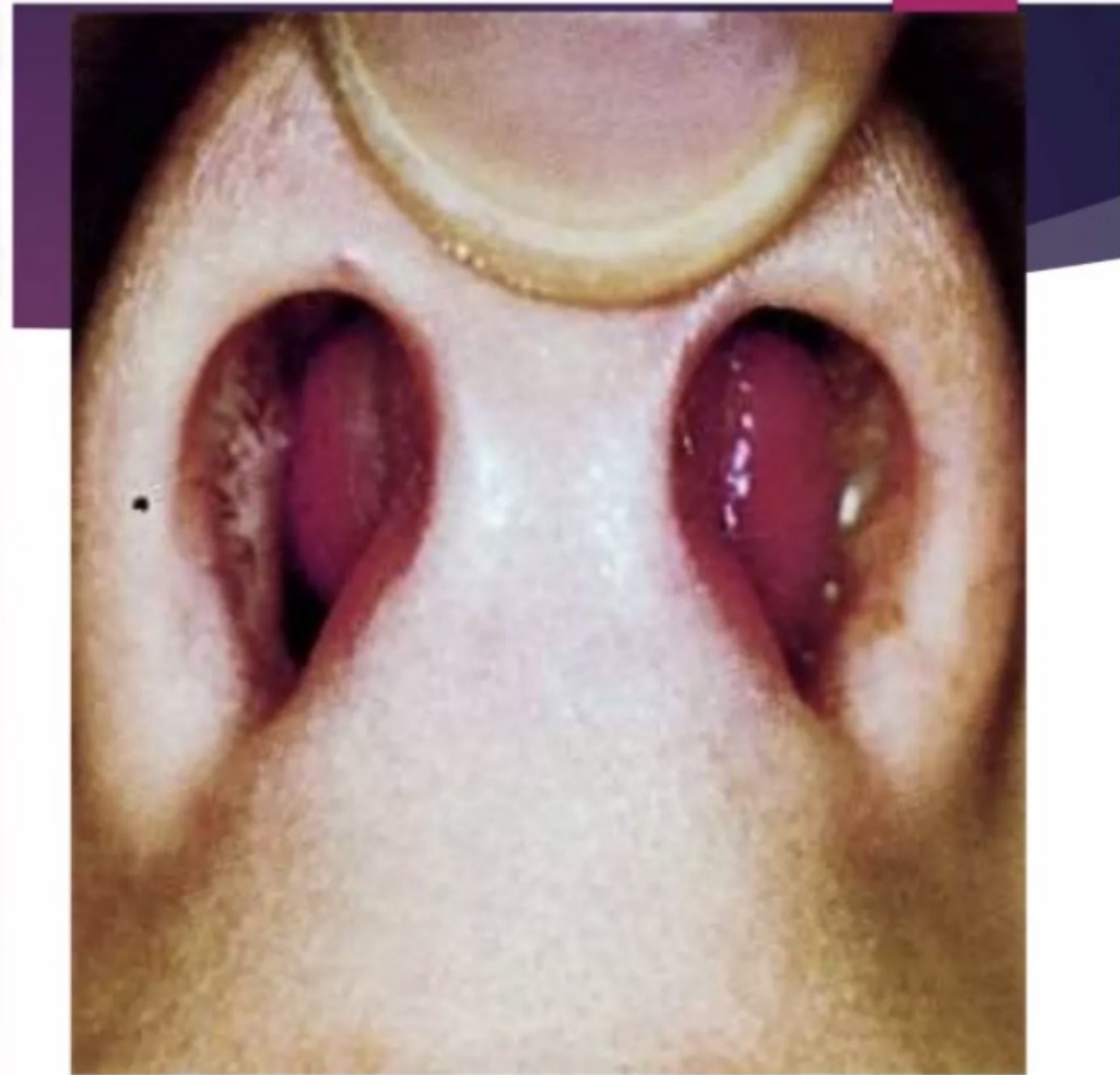
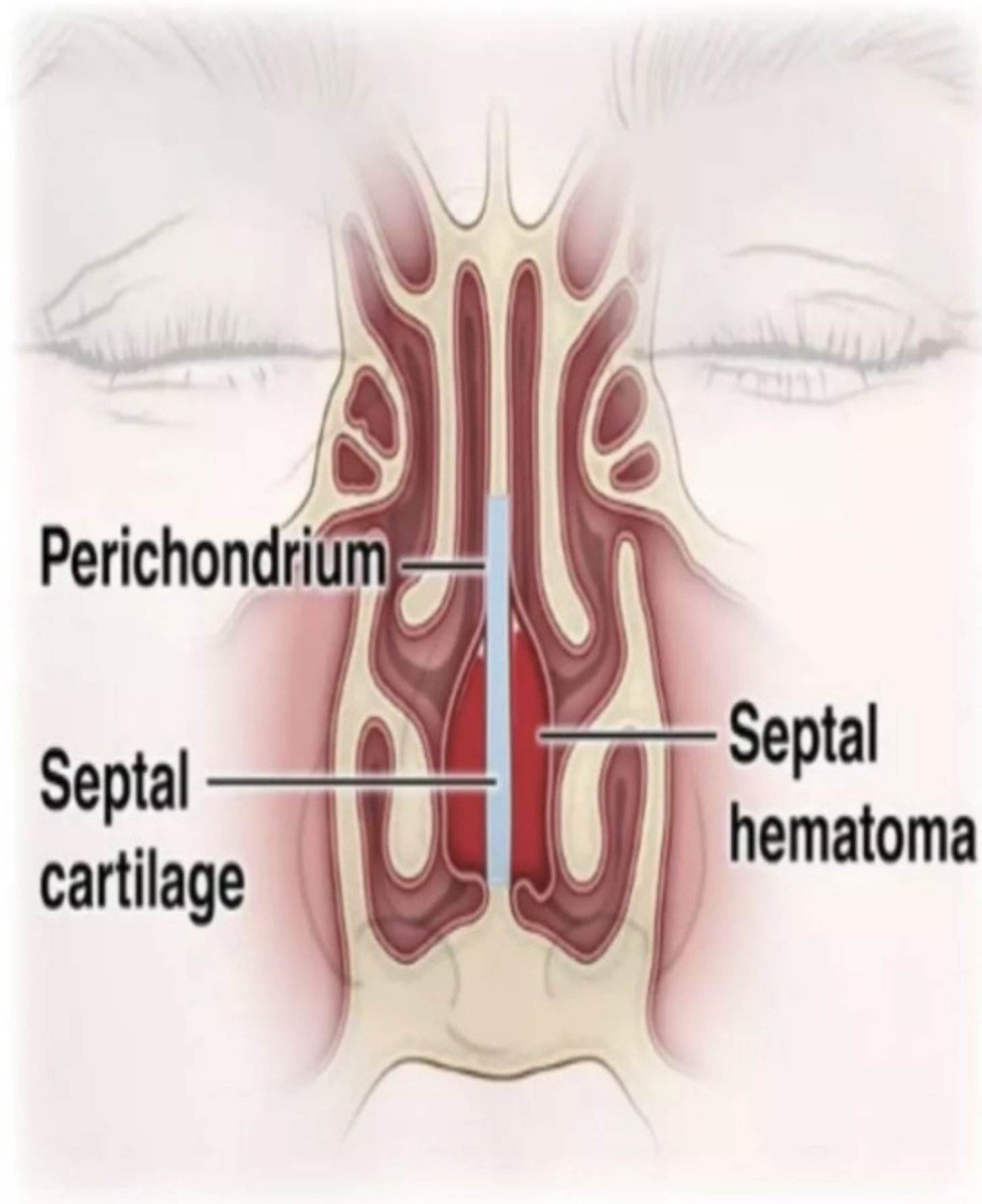
- ▶ Nasal cavity:
 - ▶ Narrow (septal deviation or hypertrophy turbinates, polyp, growth)
 - ▶ wide (atrophic rhinitis)
 - ▶ Discharge (muroid, mucopurulent, purulent, blood)
 - ▶ Crusting
 - ▶ Foreign body.




Nasal Septum

- ▶ Nasal Septum:
 - ▶ Deviation or spur
 - ▶ Ulcer
 - ▶ Perforation
 - ▶ Swelling (hematoma or abscess)
 - ▶ Growth (rhinosporidiosis, hemangioma, fibroangioma)
 - ▶ Bony destruction (syphilis)
 - ▶ Cartilaginous destruction (lupus vulgaris)







Floor of nose:

- ▶ Defect (cleft palate or fistula)
- ▶ Swelling (dental cyst)
- ▶ Neoplasm (hemangioma)
- ▶ Granulations (foreign body or osteitis)



Inferior and middle turbinates:

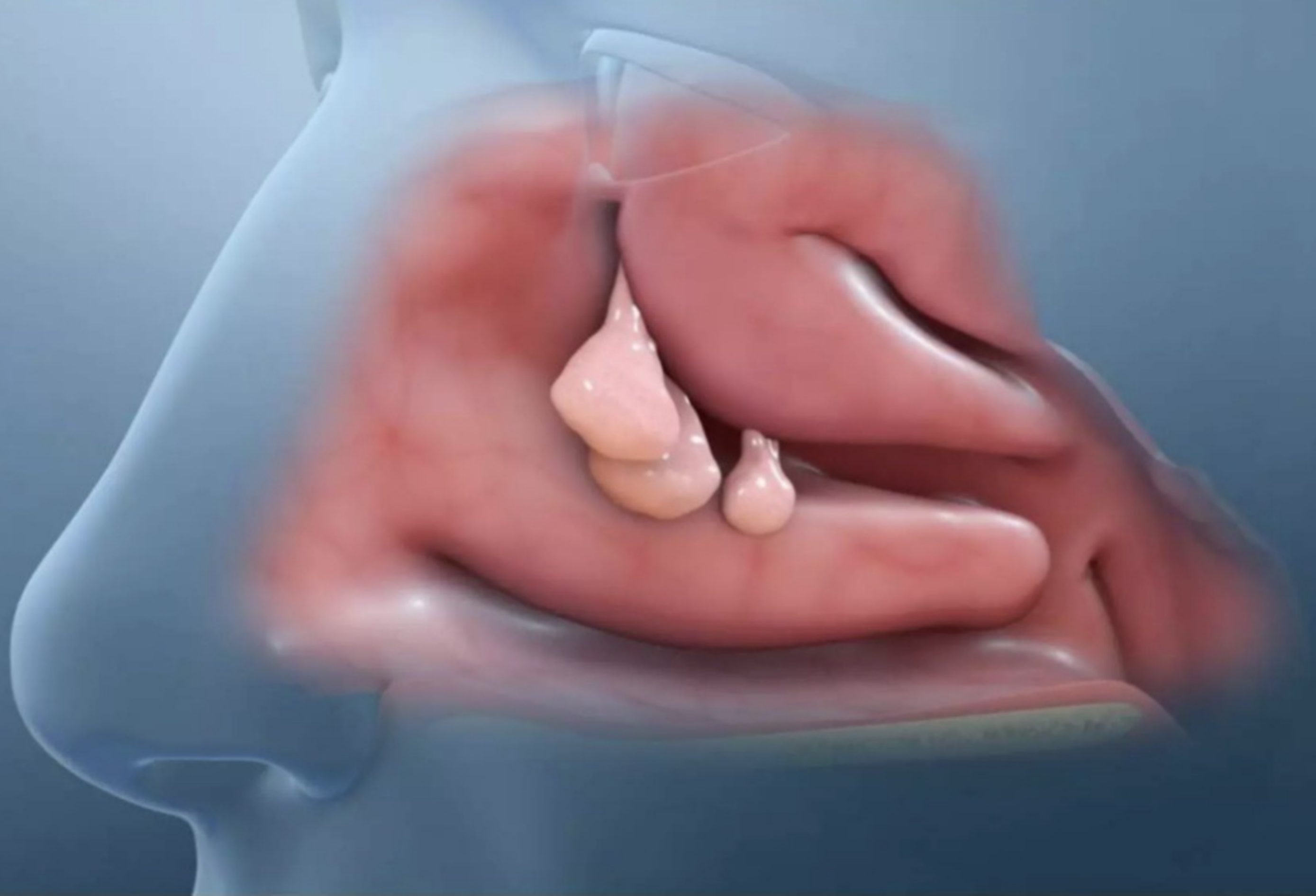
- ▶ Compensatory hypertrophy of middle and inferior turbinates is common on the concave side of deviated nasal septum.
- ▶ Enlarged, swollen and pale (allergic rhinitis)
- ▶ small and atrophic (atrophic rhinitis).

Grade	Definition
Grade I	The turbinate was defined as mild enlargement with no obvious obstruction
Grade II	The turbinate was in between grade I and grade III
Grade III	The turbinate completely occluded the nasal cavity



Inferior and middle meatuses:

- ▶ Discharge
- ▶ Polyps



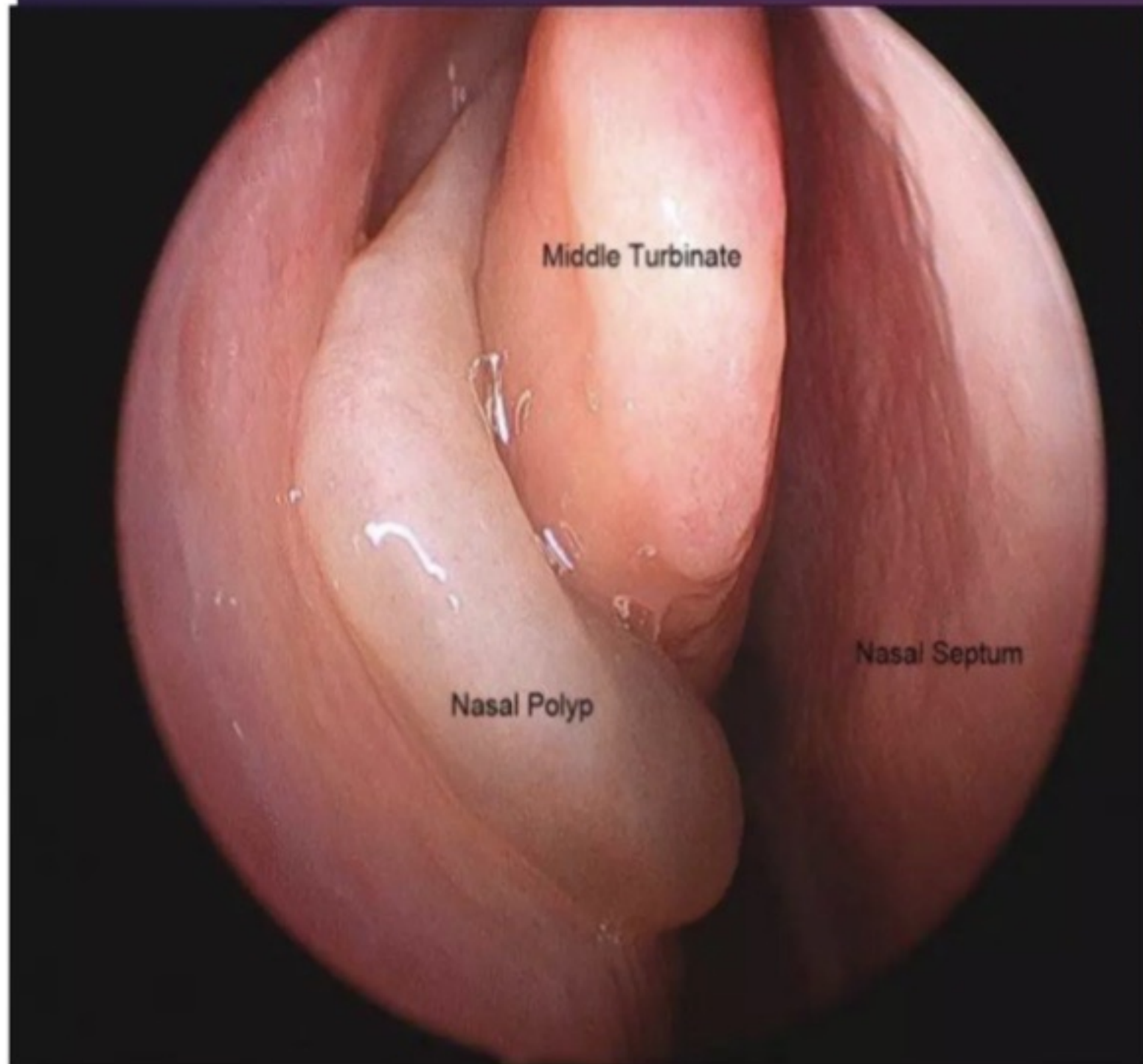


Table 1 Endoscopic nasal polyp score

Polyp score

Polyp size

0	No polyps
1	Small polyps in the middle meatus not reaching below the inferior border of the middle turbinate
2	Polyps reaching below the lower border of the middle turbinate
3	Large polyps reaching the lower border of the inferior turbinate or polyps medial to the middle turbinate
4	Large polyps causing complete obstruction of the inferior nasal cavity

Posterior Rhinoscopy

- ▶ It consists of examining the **nasopharynx** and **posterior part of nasal cavity** by the postnasal mirror.
- ▶ Postnasal mirror is warmed but should not be hot. It is always better to test on the back of hand before introducing.
- ▶ depression the patient's tongue with a tongue depressor that is held in left hand and introduces posterior rhinoscopic mirror (postnasal mirror).
- ▶ The mirror should be held in right hand like a pen and carried behind the soft palate, along the tongue but without touching the posterior third of tongue (to avoid gag reflex).





Posterior rhinoscopy

- ▶ Posterior choanae: Atresia, polyp
- ▶ Posterior ends of inferior turbinates: Hypertrophy
- ▶ Posterior margin of bony nasal septum
- ▶ Roof of nasopharynx
- ▶ Adenoids

