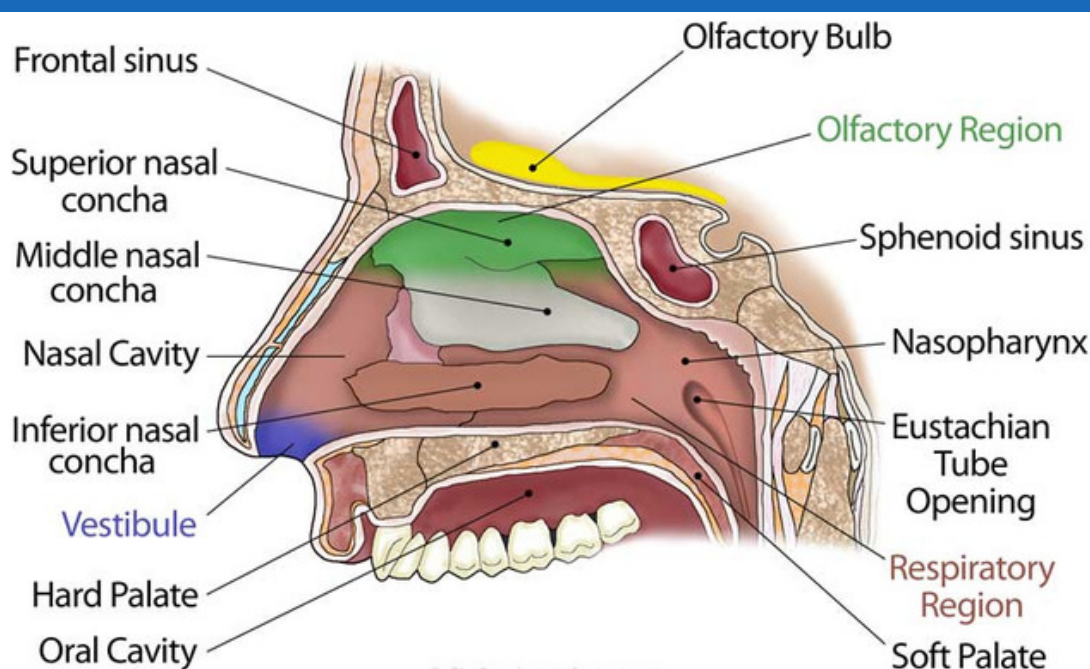


NASAL FUNCTION AND OLFACTION

Episode 28.1



ABERRATIONS IN AIRFLOW, AND EVALUATION OF

- Airway may be complicated by: 1) irregular contours and direction of flow (anatomy, mass), 2) collapsible segments, and 3) areas under vascular control
- May be measured by RHINOMANOMETRY. Objectively measures resistance and adequacy of airway by measuring pressure at the anterior end of nose
- Two major types of nasal obstruction - mucosal hypertrophy/congestion and structural deformities
- Improvement in symptoms after topical decongestion suggests mucosal obstruction

OLFACTION - ANATOMY

- Olfactory bulb: extension of forebrain, protected by cribriform plate of ethmoid bone
- Olfactory mucosa: high in nasal cavity, protected by mucous
- Olfactory nerve is unique: the only cranial nerve with direct communication to the environment!

OLFACTION - LOSS OF

- 3 most common causes:

Trauma	URTI	Chronic rhinosinusitis
May be recognized late from decreased LOC / injury extent	Usually transient due to inflammation	Fluctuates with CRS disease course
Often incomplete recovery	Hyposmia > anosmia	Often gradual
		May improve with aggressive treatment

- May also be due to idiopathic, congenital, psychiatric, toxic, neoplastic, and iatrogenic causes

OLFACTION - MANAGEMENT

- Diagnose dysfunction with exam and smell threshold and/or identification tests. Consider imaging (if warranted). CT sinus helpful in CRS, suspicion of mass or preoperative planning
- Treatment depends on etiology but may include saline lavage, steroids, anti-histamines, antibiotics or surgery