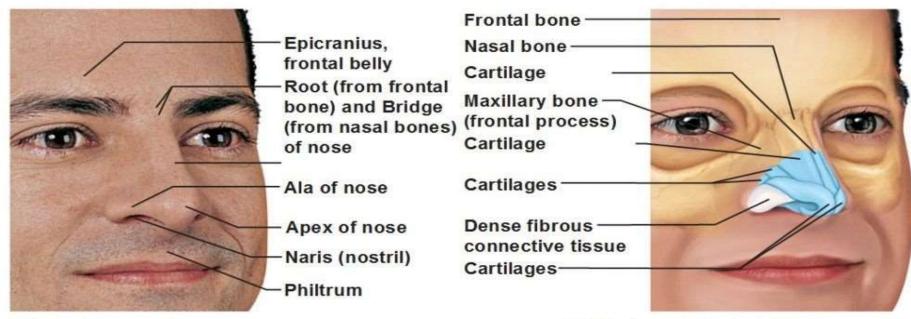
#### Assessment of Mouth Oropharynx, Nose and Sinus

#### • Nose and Sinuses

- Structure and function of Nose
- Nose and paranasal sinuses are first segment of the respiratory system
- Responsible for receiving, filtering, warming, and moistening inhaled air
- Sensory organ for smell, because cranial nerve I (Olfactory) located in it.
- Nose consists of two portions. External and Internal

# The Nose (external)



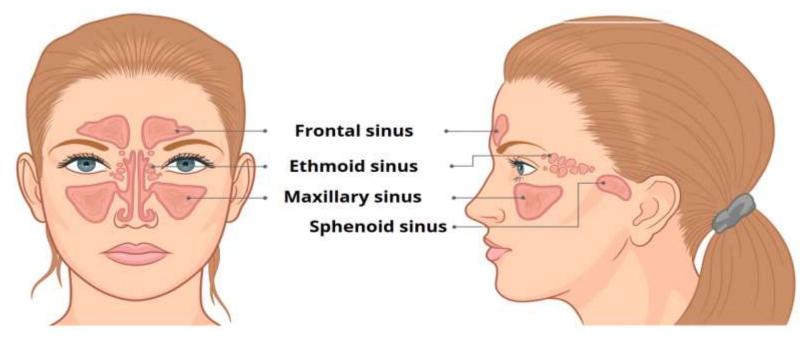
(a) Surface anatomy

(b) External skeletal framework

#### Nose anatomy

- Bridge is the superior part (nasal bone)
- Tip is the anterior part of nose (cartilage)
- Hair Filter coarse matter from entering nasal cavity
- Ciliated mucous membrane filters dust and bacteria. The rich blood supply warms and humidifies the air
- Turbinate's (conchae) increase the surface are of the nasal **cavity so that more air is filtered, warmed, and humidified**

The paranasal sinuses are air-filled extensions of the nasal cavity. There are four paired sinuses – named according to the bone in which they are located – maxillary, frontal, sphenoid and ethmoid. Each sinus is lined by a ciliated pseudostratified epithelium, interspersed with mucus-secreting goblet cells.



**Function** of the paranasal sinuses:

- Lightening the weight of the head
- Supporting immune defense of the nasal cavity
- Humidifying inspired air
- Increasing resonance of the voice

## a. History (from Review of Systems):

Discharge (characteristics), unusually frequent or severe colds, sinus pain, nasal obstruction, nosebleeds, allergies or hay fever, change in sense of smell

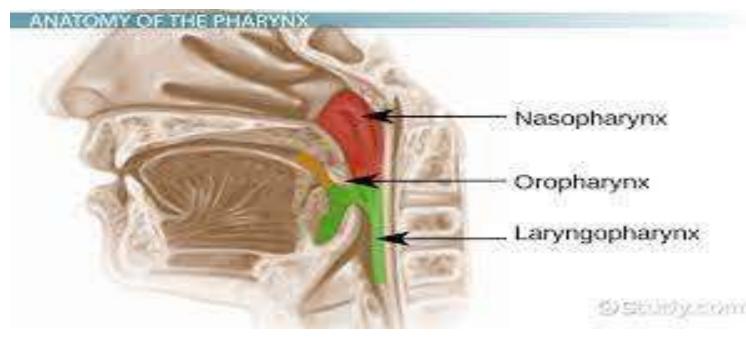
## **b. Inspection:**

Symmetry and deformity

# c. Palpation:

- 1. Nasal patency
- 2. Frontal and maxillary sinuses for tenderness

**Oropharynx:** It is a part of the pharynx located at the back of the mouth. The muscles and structures in the oropharynx allow us to breathe while chewing or manipulating material in the oral cavity.



## a. History (from Review of Systems):

- 1. Mouth pain, frequent sore throat, bleeding gums, toothache, lesion in mouth or on tongue, dysphagia, hoarseness or voice change, tonsillectomy, altered taste
- 2. Pattern of daily dental care, use of dentures, bridges, last dental checkup

# **b. Inspection:**

- 1. Lips for color, moisture, cracking, or lesions
- 2. Teeth and gums for abnormalities
- 3. Tongue for color, surface characteristics, look under tongue for lesions, and assess moisture
- 4. Using a wooden tongue blade and a good light source, inspect the inside of the patients mouth including the buccal folds and under the tongue. Note any ulcers, white patches (leucoplakia), or other lesions. If abnormalities are discovered, use a gloved finger to palpate the anterior structures and floor of the mouth.
- 5. Inspect the posterior oropharynx by depressing the tongue and asking the patient to say "Ah." Note any tonsilar enlargement, redness, or discharge.
- 6. Buccal mucosa for color, moisture, nodules, and lesions\*
- 7. Tonsils for size, color, and surface characteristics

# c. Palpation:

Instruct the students to don gloves, take a gauze pad and ask the partner to stick out their tongue. As the student holds the tongue with the gauze pad they palpate (by sliding their finger) along the sides of the tongue for any signs of cancer-lesions. They should also do a finger sweep of the oral mucosa assessing for any papules

#### Assessment of Mouth Oropharynx, Nose and Sinus

## Preparation

- Before beginning your assessment, educate the patient and family about why a physical assessment will be performed, what to expect during and after the procedure and any follow-up testing that may be necessary.
- Position the patient sitting up with his or her head at your eye level. The equipment needed for the assessment would include an Otoscope with short, wide-tipped nasal speculum attachment, penlight, two tongue blades, cotton gauze pad, and gloves.
- Normally the nose should be symmetric, midline, and in proportion to other facial features. Inspect the nose for any deformity, asymmetry, inflammation, or skin lesions. Test the patency of the nostrils فتحات الأنف by pushing each nostril wing shut with your finger while asking the patient to sniff inward الشم للداخل. View each nasal cavity with the person's head erect and then with the head tilted back. Using your thumbs palpate the frontal sinuses by pressing up and under the eyebrows, and over the maxillary sinuses below the cheekbones (Jarvis, 2018).

Equipment for examination of Nose, Mouth and Throat:

- -Otoscope with short, wide-tipped nasal speculum
- -Pen light
- -Two tongue blades
- -Cotton gauze pad
- Gloves



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Nasal Speculum

