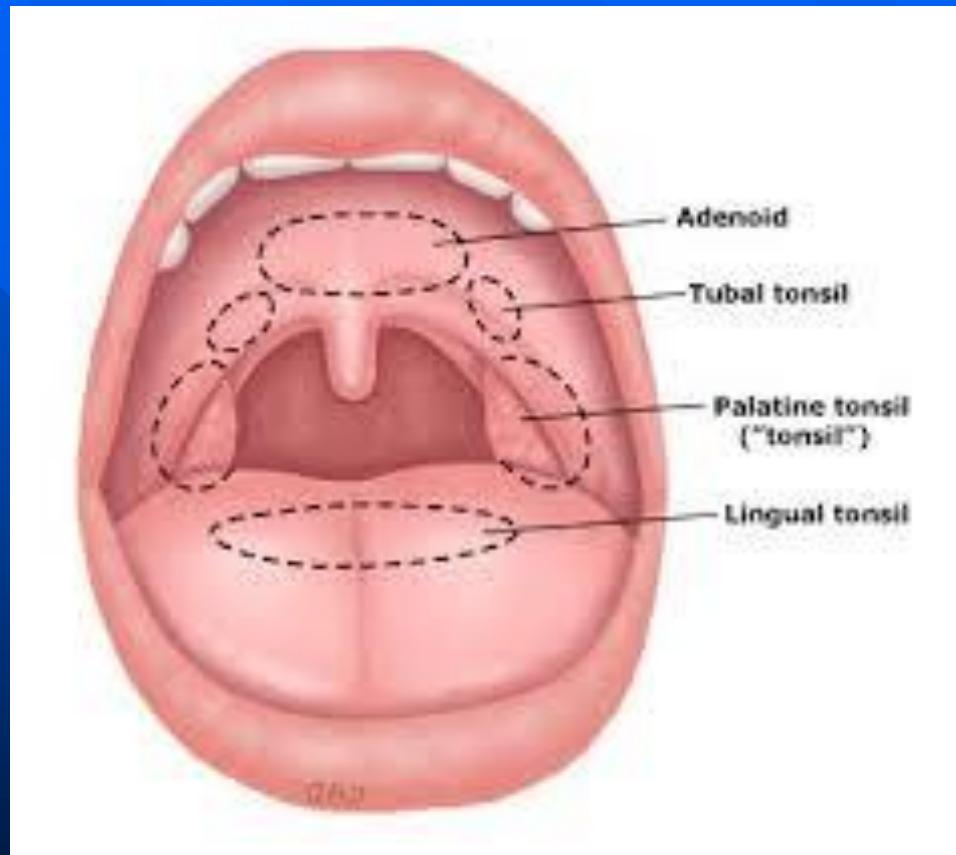


# Nasopharyngeal Non-Hodgkin Lymphoma

- Non-Hodgkin lymphoma (NHL) of pharyngeal mucosal space (PMS)
- Multiple subtypes, usually B- or T-cell categories
- 3 subsites of Waldeyer lymphatic ring
  - Nasopharyngeal adenoids
  - Palatine tonsils
  - Lingual tonsil
- When in H&N, commonly involves Waldeyer ring
- Adult more common than pediatric; > 50 year

# Waldeyers Ring



# Imaging

- Minimally enhancing bulky mass filling PMS airway
  - Often without deep extension into surrounding spaces
- Associated NHL nodal disease present 50% of time
  - **Nodes usually large, > 2 cm, & nonnecrotic**
  - Nodes may be centrally necrotic in high-grade NHL
    - » Especially AIDS-related NHL

# DDX:

## ■ Tonsillar Lymphoid Hyperplasia

- Patients < 20 years old (NHL usually > 40 years old)
- Symmetric enlargement of adenoidal & tonsillar tissue
- Internal enhancing septa seen on T1 C+ MR images

## ■ Nasopharyngeal Carcinoma

- Poorly circumscribed nasopharyngeal PMS mass
- Often mimics NHL on imaging alone
- Associated malignant, often necrotic, adenopathy

## ■ Palatine Tonsil Squamous Cell Carcinoma

- Invasive palatine tonsil mass
- Often mimics NHL on imaging alone

## ■ Lingual Tonsil Squamous Cell Carcinoma

- Invasive lingual tonsil mass
- Often mimics NHL on imaging alone

## ■ Pharyngeal Mucosal Space Minor Salivary Gland Malignancy

- May be indistinguishable from H&N SCCa
- Associated nodal metastases are rare

## ■ Pharyngeal Mucosal Space Benign Mixed Tumor

- Well-circumscribed, noninvasive PMS mass

## ■ Inflammatory Pseudotumor/IgG4 Disease

- Poorly defined autoimmune disease can present as PMS mass
- Spectrum that includes Sjögren syndrome, thyroiditis, autoimmune disease



Large, exophytic, minimally enhancing NHL (white solid arrow) arises in left lingual lymphoid tissue with near-complete airway obstruction. Note level IIA node (white open arrow) with no central necrosis, a common finding in nodal lymphoma.



Axial T2WI FS MR in the same patient reveals mass (white solid arrow) is relatively low signal intensity with invasion of prevertebral muscles (white curved arrow) and parapharyngeal space (white open arrow). Note mastoid opacification from tumor invasion of eustachian tube orifice. Nasopharyngeal carcinoma could exactly mimic this imaging appearance.

# Lymphoma

## Pre-Treatment

