



# HPV RELATED CANCERS

THE ROLE OF THE DENTAL PROFESSIONAL AND THE VACCINE



# HPV Related Cancer of the Oropharynx

- ▶ According to the Surveillance, Epidemiology, and End Results (SEER) data from 1988 to 2004, the prevalence of HPV-negative cancer declined by 50%, and HPV-positive oropharyngeal cancers increased by 225%
- ▶ According to the Center for Disease Control:
  - HPV is thought to cause 70% of oropharyngeal cancer (tonsil and base of tongue) in the United States
  - Women have a 3 fold prevalence of HPV infection- however, HPV related cancers are 6-7x more common in men than women
- ▶ According to the Oral Cancer Foundation this fast growing population are otherwise healthy, non-smoking individuals in the 35-55 age range.



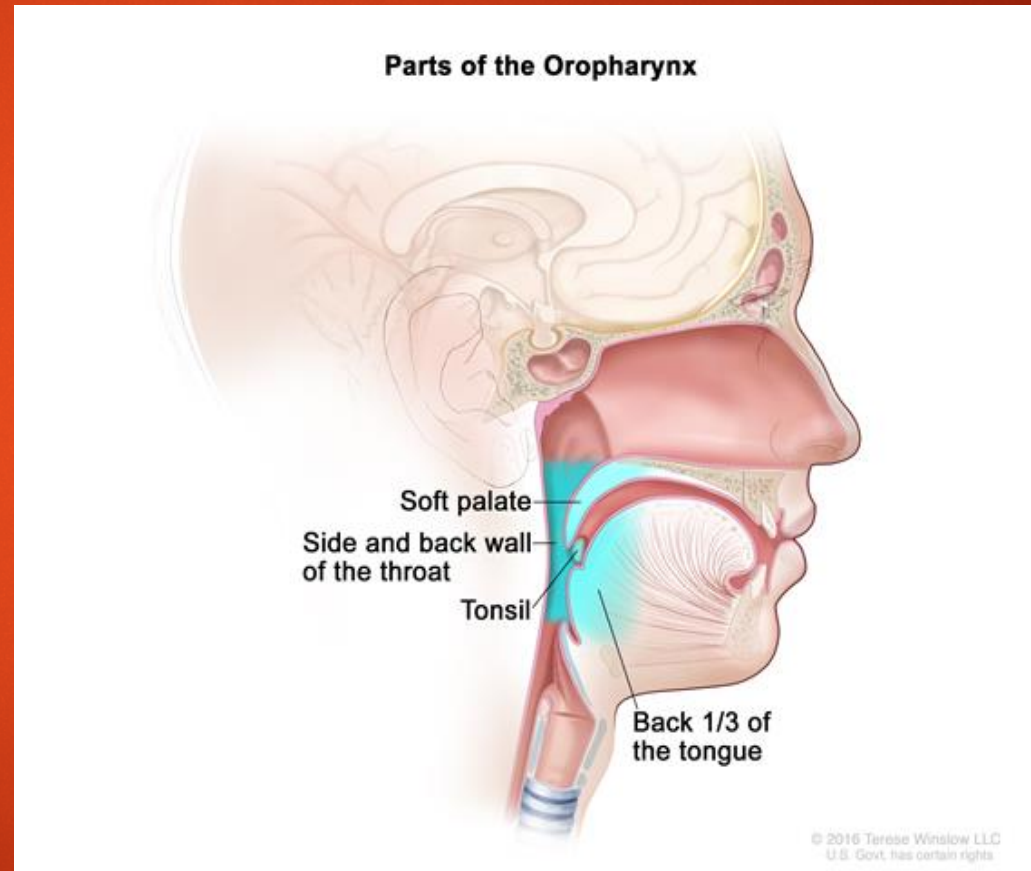
# Clinical Signs and Symptoms

- ▶ Typically HPV related primary lesions are small in early stages and difficult to detect clinically
- ▶ Patient reports include:
  - Fullness in the throat
  - Swollen tonsil/asymmetry
  - Pain when swallowing or feeling of something stuck in throat
  - Ear pain on one side
  - Painless, persistent, bump or swelling on one side of the neck



# Anatomical Location

- Base of the tongue
- Vallecula.
- Tonsillar region, which includes the fossa and the anterior and posterior pillars.
- Soft palate, which includes the uvula.
- Posterior and lateral pharyngeal walls.





# Tonsil cancer presentation

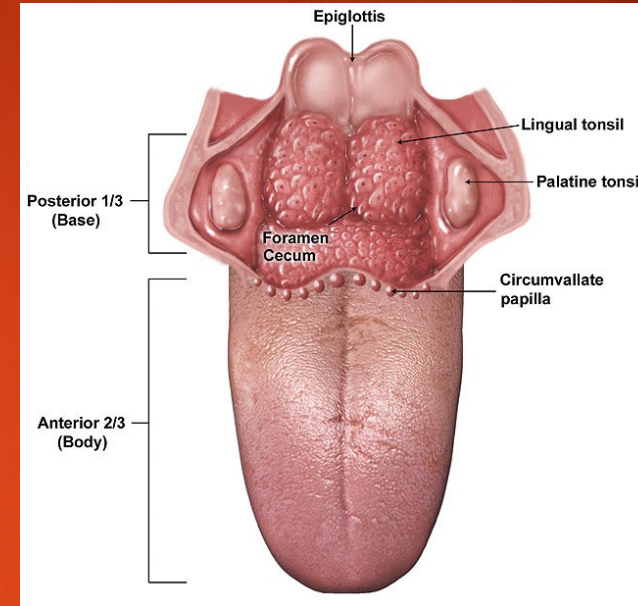
- Embedded in tonsillar crypts
- Asymmetry of tonsils of soft palate
- Deviated uvula





# Base of tongue

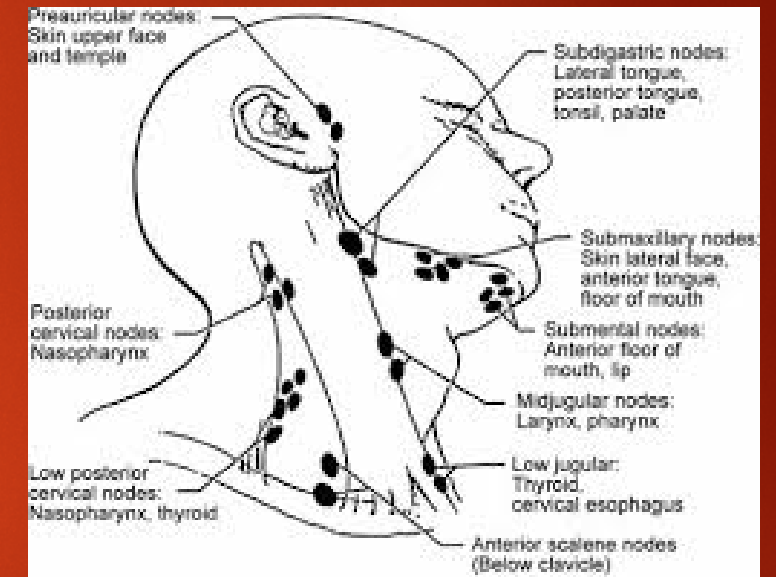
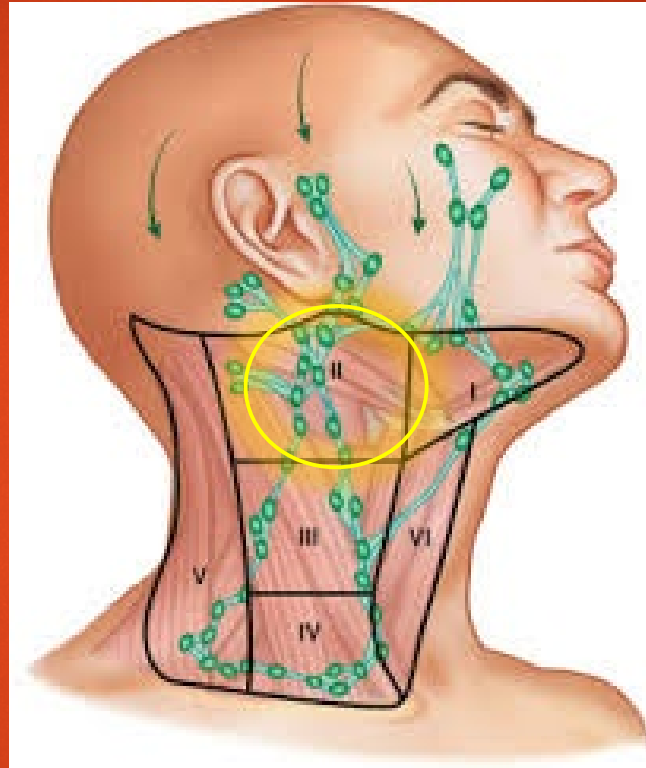
- Exophytic or endophytic
- Palpation
- Referral to ENT/Head and Neck surgeon for





# Metastatic Lymph Node

- Most common drainage from the primary tumor to Level II, Subdigastric nodes
- Often the first symptom noticed by the patient





# Common Treatment Modalities

- Treatment modality is determined by the cancer staging (TNM staging criteria) and the presence of high risk features
- TNM staging= **T**umor size, **N**odal involvement, distant **M**etastasis
  - Treatment considerations include the following:
  - Surgery
  - Surgery + Radiation +/- Chemotherapy
  - Radiation + Chemotherapy (Concurrent Chemoradiation Therapy)
  - Chemotherapy alone is not a proven modality



# Difficulties of treatment

## ► ***Acute complications***

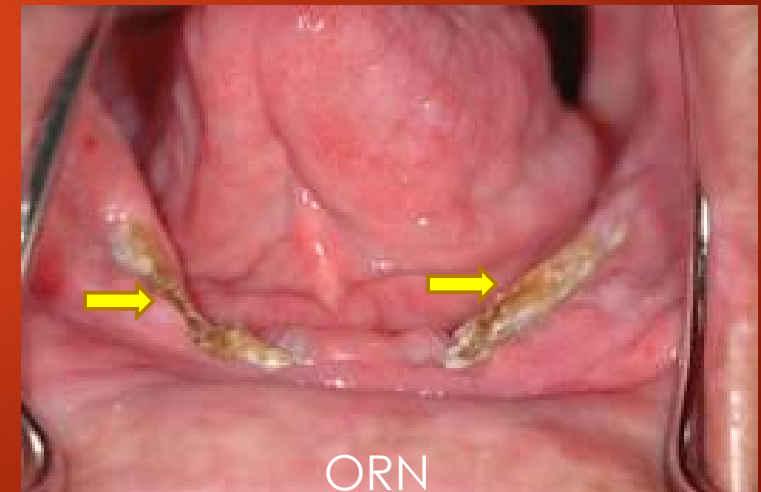
- Oral mucositis (OM)
- Oral candidiasis
- Xerostomia
- Excess mucus/phlegm
- Taste disorder
- Difficulty swallowing, speaking and chewing
- Trismus





# Long term side effects Quality of Life

- ▶ Xerostomia-
- ▶ Radiation Caries-
- ▶ Taste Alterations-
- ▶ Trismus-
- ▶ Difficulty Swallowing- aspiration pneumonia-
- ▶ ORN (Osteoradionecrosis)-





# Role of the Dental Health Professional

- ▶ \*\*\*\*Head and Neck cancer screening at every visit\*\*\*
- ▶ <https://ebd.ada.org/en/evidence/guidelines/oral-cancer>
- ▶ <https://www.youtube.com/watch?v=7mv073MJzlg>
- ▶ <https://www.rdhmag.com/pathology/pathology/article/14173681/how-to-perform-a-head-and-neck-oral-oropharyngeal-cancer-screening>

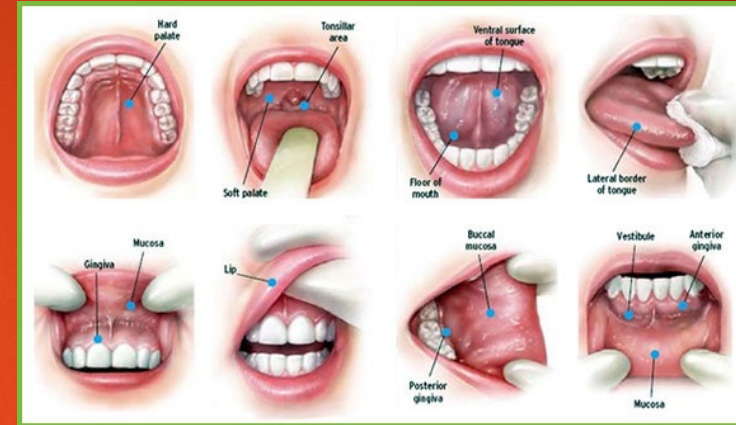
## Must Include

- ▶ Must include the office TEAM
- ▶ Starts with patient greeting
- ▶ Medical and dental history
- ▶ Patient interview
- ▶ Intra and Extra-oral exam for abnormalities
- ▶ Referral process
- ▶ Follow-up



# Screening

White light visual  
and palpation of  
ALL soft tissue

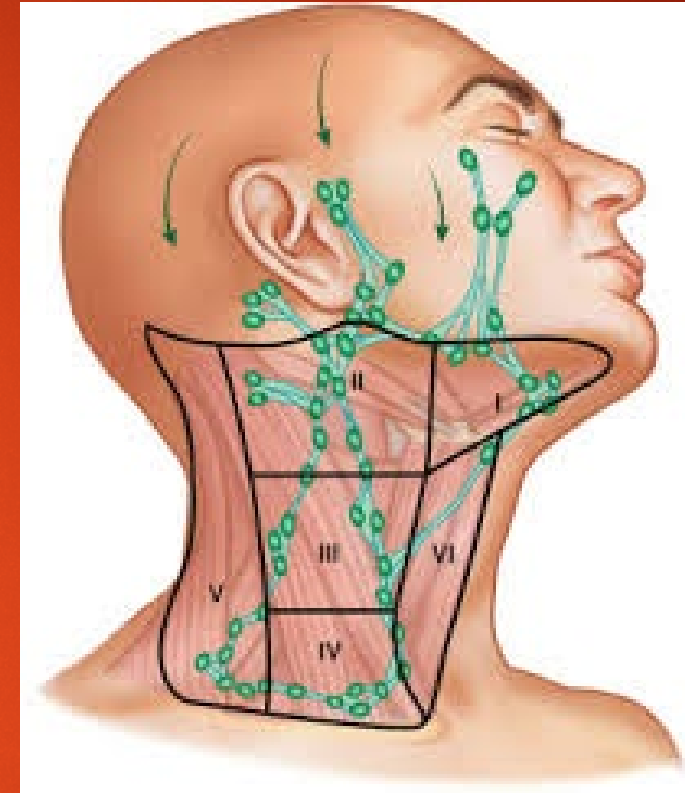






# What is Missing?

Not a thorough Oral/head and Neck  
Cancer Screening without the  
palpation of the lymph nodes





# Raise Awareness

- ▶ Raise awareness and educate patients about Head and Neck Cancers- specifically the rise in HPV driven cancers in younger populations without a history of smoking and or alcohol use
- ▶ Discuss risk factors such as HPV, smoking and alcohol use
- ▶ Discuss the HPV Vaccine and its role in CANCER PREVENTION
- ▶ Office participation in Oral Cancer Awareness Month
- ▶ Tobacco cessation





# Discussing the Vaccine

- ▶ Start the conversation during your Oral Cancer Screening

“I screen all of my patients”

“Everyone is at risk...”

“Have you discussed the vaccine with your pediatrician?”

“the vaccine is Cancer Prevention”

- ▶ Key Facts in your back pocket:

“According to the CDC after over 12 years of monitoring and research, and over 120 million doses, the vaccine is considered ‘very safe’”

“CDD recommends a9-valent vaccine for boys and girls



# Resources and Tools

Stress importance of RELIABLE resources that publish evidence based/backed information

- CDC
- American Cancer Society
- HPV Roundtable
- Readily available



## HPV Vaccine Safety and Effectiveness

HPV vaccination provides safe, effective, and long-lasting protection against cancers caused by HPV.

HPV vaccination prevents cancer

HPV vaccination is safe for boys and girls

## Tips and Time-savers for Talking with Parents about HPV Vaccine

Recommend the HPV vaccine series the same way you recommend the other adolescent vaccines. For example, you can say "Your child needs these shots today," and name all of the vaccines recommended for the child's age.

Parents may be interested in vaccinating, yet still have questions. Taking the time to listen to parents' questions helps you save time and give an effective response. CDC research shows these straightforward messages work with parents when discussing HPV vaccine—and are easy for you or your staff to deliver.



## Talking to Parents about HPV Vaccine



HPV VACCINE  
IS CANCER PREVENTION

Recommend HPV vaccination in the **same way** and on the **same day** as all adolescent vaccines. You can say, "Now that your son is 11, he is due for vaccinations today to help protect him from meningitis, HPV cancers, and whooping cough. Do you have any questions?" Taking the time to listen and understand parents' concerns can help you respond to their concerns more effectively.

Why does my child need HPV vaccine?

HPV vaccine is important because it prevents infections that can cause cancer. That's why we need to start the shot series today.

Some HPV infections can cause cancer—like cancer of the cervix or in the back of the throat—but we can protect your child from these cancers in the future by getting the first HPV shot today.

What diseases are caused by HPV?

How do you know the vaccine works?

Studies continue to prove HPV vaccination works extremely

HPV is a very common infection

Is my child really at risk for HPV?



# Our Responsibility

- ▶ 51% of teens have successful completion-Healthy People 2020 goal = 80%
- ▶ Plant the seed early
- ▶ Help parents and teens understand the benefits of the vaccine
- ▶ Help parents and teens make an informed decision that includes the risks of not vaccinating



# Final thoughts

- ▶ Currently there is no screening process to detect HPV related lesions i.e. saliva testing, blood test
- ▶ Lesions are difficult if not impossible to detect clinically
- ▶ Cancers will be detected in late stages requiring difficult treatments
- ▶ The Best treatment is PREVENTION!
- ▶ Discuss the Vaccine with your patients



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