Head and Neck Cancer – How to recognize it in your office

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Disclosures

I do not have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.
Take Home Message

• The battle in head and neck cancer can be won and lost on the front lines with early detection and referral to those with the proper training and experience to deal with these problems.
High index of suspicion

- Risk Factors
- Symptoms (History)
- Signs (Physical Exam)
- Examples

Oral cavity / Oropharynx

Skin
Who gets the referral?

- Otolaryngologist/Head and Neck surgeon
- Plastic surgeons
- General surgeons
- Endocrine surgeons
- Oral Maxillofacial surgeons
- Dentists
- Dermatologists
Histologic Spectrum of Head and Neck Cancer

**Upper Aerodigestive Tract**
- **Oral Cavity**
- **Oropharynx**
- Larynx, Supraglottic
- Larynx, Glottic
- Hypopharynx
- Nasopharynx
- Neck Metastases – Unknown Primary
- Nasal Cavity /Ethmoid Sinuses
- Maxillary Sinus

**Major Salivary Glands**
- Parotid
- Submandibular Gland

**Thyroid**
- Thyroid - Differentiated Carcinoma
- Thyroid - Medullary Carcinoma
- Thyroid - Anaplastic Carcinoma

**Other Tumors**
- Ear and Temporal Bone
- **Head and Neck - Cutaneous Melanoma/Aggressive carcinoma**
- Head and Neck - Sarcoma
- Parapharyngeal Space Tumors
- Skull Base Neoplasms
Progression to Cancer
Which lesion should I refer?
# Cancer Statistics 2018

<table>
<thead>
<tr>
<th>Site</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Breast</td>
<td>266,120</td>
</tr>
<tr>
<td>2. Lung</td>
<td>234,030</td>
</tr>
<tr>
<td>3. Prostate</td>
<td>164,690</td>
</tr>
<tr>
<td>4. Colon/Rectum</td>
<td>140,250</td>
</tr>
<tr>
<td>5. Melanoma</td>
<td>91,270</td>
</tr>
<tr>
<td>12. Thyroid</td>
<td>53,990</td>
</tr>
<tr>
<td>13. Oral cavity/Oropharynx</td>
<td>51,540</td>
</tr>
<tr>
<td>21. Larynx</td>
<td>13,150</td>
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</tbody>
</table>
## Cancer Statistics 2018

<table>
<thead>
<tr>
<th>Site</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>154,050</td>
</tr>
<tr>
<td>Breast</td>
<td>40,920</td>
</tr>
<tr>
<td>Prostate</td>
<td>29,430</td>
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<tr>
<td>Colon/Rectum</td>
<td>50,630</td>
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<tr>
<td>Melanoma</td>
<td>9,320</td>
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<tr>
<td>Oral cavity</td>
<td>2,510</td>
</tr>
<tr>
<td>Larynx</td>
<td>3,710</td>
</tr>
<tr>
<td>Thyroid</td>
<td>2,060</td>
</tr>
</tbody>
</table>
Screening challenge for Head and Neck Cancers

- Low incidence/mortality=low priority
- Less public awareness
- No established screening guidelines

MORE EDUCATION AND PREVENTION IS NEEDED
62% of U.S. adults know very little, or nothing at all about oral cancer

MORE THAN 81% OF U.S. ADULTS would like to be screened for oral cancer at every dental check-up.

ONLY 29% OF U.S. ADULTS reported that they were screened for oral cancer at their last dental check-up.

ONLY 20% OF U.S. ADULTS say that their dental professional spoke with them about risk factors for oral cancer at their last dental check-up.

MORE THAN 77% OF U.S. ADULTS want their dentist to help them learn ways to reduce their risk of getting oral cancer.
NCCN Clinical Practice Guidelines In Oncology (NCCN Guidelines®)
Prostate Cancer Early Detection

Age 45-75
- Discuss risks and benefits of prostate cancer screening with physician.
- Have a baseline PSA and consider baseline DRE.
- If PSA <1 ng/mL and DRE normal, repeat testing every 2-4 years.
- If PSA 1-3 ng/mL and DRE normal, repeat testing every 1-2 years.
- If PSA >3 ng/mL or very suspicious DRE, physician may suggest additional testing or biopsy.

Age 75+
- Talk with physician and assess general health to decide together if routine PSA/DRE testing should continue.
- For patients who continue testing, if PSA <3ng/mL and DRE normal, repeat testing every 1-4 years.
- If PSA >3 ng/mL or very suspicious DRE, physician may suggest additional testing or biopsy.

New Breast Cancer Screening Guideline
for women with average risk

AGE 40
- Talk with your doctor about when to begin screening.
- Women should have the opportunity to begin screening if they choose.

AGE 45
- Begin yearly mammograms by age 45.

AGE 55
- Transition to mammograms every other year at age 55 or continue with annual mammography, depending on your preferences.

AGE 55+
- Continue to have regular mammograms for as long as you’re in good health.

New Screening Recommendations
American College of Gastroenterology

<table>
<thead>
<tr>
<th>If patient has...</th>
<th>Risk and screening...</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-degree relative with advanced adenoma or colon cancer, diagnosed at age ≥ 60 years</td>
<td>Same as average risk. Colonoscopy every 10 years beginning at age 50</td>
</tr>
<tr>
<td>First-degree relative with advanced adenoma or colon cancer, diagnosed at age &lt; 60 years</td>
<td>Higher risk. Colonoscopy every 5 years beginning at age 40, or 10 years younger than age at diagnosis of the youngest affected relative</td>
</tr>
</tbody>
</table>

NCCN Guidelines Version 1.2014
Lung Cancer Screening

EVALUATION OF FINDING

<table>
<thead>
<tr>
<th>FINDING</th>
<th>STABLE</th>
<th>INCREASE IN SIZE</th>
<th>BONDS INFILTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground glass opacity (GGO)</td>
<td>Stable</td>
<td>Increase in size</td>
<td>Increases also</td>
</tr>
<tr>
<td>Ground glass nodule (GGN)</td>
<td>Stable</td>
<td>Increase in size</td>
<td>Increases also</td>
</tr>
<tr>
<td>Non-solid nodule (NS)</td>
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FOLLOW-UP OF FINDING

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APPROPRIATE ACTIONS

- Annual LDCT for 2 years (category 1) and consider annual LDCT until patient no longer eligible for definitive treatment
- Annual LDCT for 2 years and consider annual LDCT until patient no longer eligible for definitive treatment
- Surgical excision
- Cancer confirmed See appropriate NCCN Guidelines

Note: All recommendations are category 2A unless otherwise indicated. Clinical Trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.
SCREENING
AHNS – American Head and Neck Society

• Supports physical exam screening for oral and oropharyngeal cancers in the primary care setting as a part of a routine examination

• Comprehensive oral and head and neck examination in symptomatic or high risk patients as best known method for detecting oral and oropharyngeal cancers
• Strongly encourages **HPV vaccination** of boys and girls for oropharyngeal SCC (9-26 yr.)
Head and Neck Cancer Screening Tools
Risk Factors for Head & Neck Cancer

- Tobacco Products
- Second hand smoke
- Marijuana

- Ethanol Products
  - Not primary carcinogen
  - Synergistic with tobacco

- Other Factors
  - Nutrition
  - Human Papilloma Virus
  - Genetics

- Chemicals, less common
  - Asbestos, Chromium, Nickel, Arsenic, Formaldehyde
Head & Neck Cancer
SYMPTOMS

Oral Cavity (mouth)
- Non-healing ulcer **
- Bleeding
- Loose tooth; ill-fitting denture
- Difficulty speaking
- Difficulty swallowing
- Pain
- Weight loss
Head & Neck Cancer
SYMPTOMS

**Throat**

- Ear Pain (from nerves that go to both the throat & ear)
- Painful /difficult swallowing
- Muffled Voice
- Difficult mouth-opening
- Weight Loss
- Neck Mass
Head & Neck Cancer
SYMPTOMS

LARYNX (voice box)

- Hoarseness
- Painful/difficult swallowing
- Ear pain
- Weight loss
- Neck mass
- Breathing difficulty
Physical Exam

Oral Cavity / Oropharynx
The 8-Step Oral Cancer Screening

A. Gingiva
B. Lip
C. Buccal mucosa
D. Vestibule
E. Hard palate
F. Tonsillar area
G. Ventral surface of tongue
H. Lateral border of tongue
Physical Exam – Salivary gland
Physical Exam – Salivary gland lymphatics
Physical Exam - Thyroid
Physical Exam – Cervical Lymphatics

Lymph Glands of the Head and Neck

- Lymph channels
- Occipital lymph glands
- Cervical lymph glands
- Parotid salivary gland
- Parotid lymph glands
- Submental lymph glands
- Submandibular lymph glands
- Supraclavicular lymph glands
- Clavicle
- Muscle
Head & Neck Cancer
Expected Lymphatic Drainage
Oral Tongue

Head & Neck Cancer
Expected Lymphatic Drainage
Lower Gingiva

Normal Variants
➢ Carotid Bulb
➢ C2
➢ Hyoid bone
Circumvallate Papillae

Normal anatomy: tongue papillae
Inferior Turbinate
TORI

Torus Palatini

Torus Mandibularis
High Index of Suspicion
Middle ear effusion
Referred Otalgia
Trismus
Oral Cavity / Oropharynx

Examples
Leukoplakia

- Means: “White Plaque”
- Unable to rub off
- 4-18% will develop into cancer
- Biopsy
Erythroplakia

- RED mucosal patch
- Persistent, without identifiable source of inflammation
- Removal recommended: 20-30% will develop cancer
Squamous cell carcinoma

From Neville, B. W. et al.
A series of events leads the cancers to grow and develop.
Melanoma and NMSC
Risk Factors for Melanoma /Skin Cancer

- Previous melanoma
- Organ transplant/Immunosuppression
- Atypical Nevi (10-20%)
  - 3-20% increased risk of CM
- High Nevus count
  - >100 nevi
- Sun / UV exposure
  - Childhood sunburn, tanning beds
- Phenotypic traits
  - Light skin, light eyes, Red/blonde hair, dense freckling
- Familial (10%)
Risk Factors for Melanoma /Skin Cancer

- Cancer prone syndrome?
  - FAMM – familial atypical mole-melanoma syndrome
  - XP – Xeroderma Pigmentosum
Skin Cancer - Symptoms

- Non-healing
- Sore
- Itchy
- Scab/Crust
- Rough/Scaly
- Firm nodule
Melanoma: ABCDEF acronym

- Asymmetry
- Border irregularity
- Color
- Diameter
- Evolution
- Funny looking

Friedman RJ et al., 1985
Helpful Patterns
Cheek High Risk SCC – Preauricular metastasis
Scalp High Risk SCC- posterior triangle
Look, Listen, Feel and Gag

- **Look** at Skin, OC/OP
- **Listen** for hoarseness
- **Feel** OC/OP
- **Gag** Tonsils/BOT
Integrated Patient Care Unit
Multi-Disciplinary Head and Neck Cancer Care
"encompass all the skills and services required over the full cycle of care"

Multi-disciplinary tumor conference, within 5-7 days of first appointment

Diagnostic Phase (5 - 7 days)
Pathology verification
Imaging
Staging
Consultations

Treatment phase
Package time (14-21 days, 100 days for surgery and xrt)

Surgery, Radiation, Chemotherapy:
Achieving target doses w/o treatment breaks

Sx management, recovery (180 days)
Acute effects: swallowing, speech, return to ADL’s

Surgical oncology
Radiation oncology
Medical oncology
Plastic Recon surgery
Nuclear medicine
Pathology
Genetics
Nurse navigator

Survivorship (2-5 years)
Delayed local-regional-failure, distant metastasis, late toxicity, second primary tumors, psycho-social problems, functional assessment and intervention

Surveillance
Treatment end to 24 mos
Highest risk for local regional failure
CHI Memorial Head & Neck and Melanoma Centers of Excellence

- 1980s – Tumor Conference/pigmented lesions
- 1992 – Lymphatic Mapping /SLNBx
- 2007 – Head and Neck Center of Excellence
- 2016 – Melanoma Center of Excellence