

Q&A

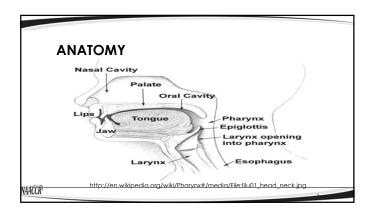
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Reminder:

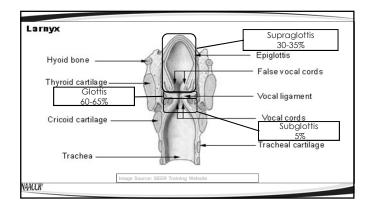
- If you have participants watching this webinar at your site, please collect their names and emails.
- We will be distributing a Q&A document in about one week.
 This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

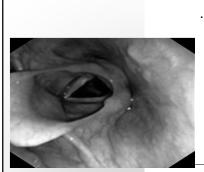






ANATOMY - Site - Supraglottis - Subsite - Suprahyoid epiglottis - Infrahyoid epiglottis - False Vocal Cords - Ventricles - Aryepiglottic folds (laryngeal aspect) - Arytenoids - Site - Glottis - Subsite - True Vocal Cords - Anterior Commissures - Posterior Commissures - Subglottis - Subglottis - Subsite - None





- Supra glottis
 - Epiglottis
 - SuprahyoidInfrahyoid

 - Aryepiglottic folds
 - Ventricular bands (False Vocal Cords)
 - Ventricular folds
- · Arytenoid cartilage Glottis
- True cords
- · Anterior and posterior commisures
- Subglottis

SQUAMOUS CELL CARCINOMA

- Nearly all laryngeal carcinomas of the larynx are epithelial
- Primarily squamous cell carcinoma
- Other types of epithelial carcinoma's of the larynx include
- Basaloid squamoid carcinomas
- Spindle-cell (i.e., sarcomatoid) carcinomas
- Small-cell carcinomas
 Nasopharyngeal-type undifferentiated carcinomas (i.e., lymphoepitheliomas)
 Carcinomas of the minor salivary gland

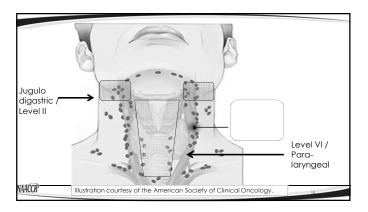
MUCOSAL MELANOMA OF THE HEAD AND NECK

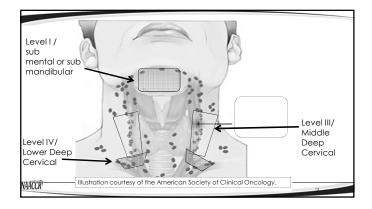
- Occur in mucosal sites of the head and neck
- Two thirds occur in nasal cavity and paranasal sinuses
- · One quarter occur in oral cavity
- $\boldsymbol{\cdot}$ Remainder occur in other sites of the head and neck
- · Highly Aggressive
- Cancers limited to the mucosa are assigned T3 N0 M0 Stage III
- In situ mucosal melanoma's very rare and are excluded from staging

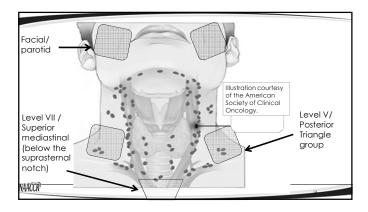
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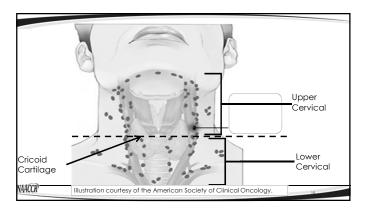
AJCC Staging Manual 7th edition

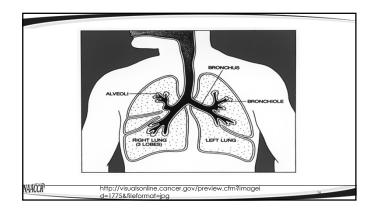
REGIONAL LYMPH NODES TERMINOLOGY Ipsilateral Same side as tumor Contralateral Opposite side as the tumor Bilateral Same side and opposite side Illustration courtesy of the American Society of Clinical Oncology.

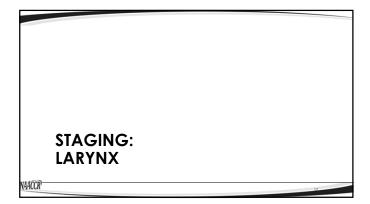












AJCC Cancer Stage

LARYNX: CHAPTER 5

- ICD-O-3 Topography Codes
- C10.1 Anterior (lingual) surface of epiglottis
- · C32.0 Glottis
- C32.1 Supraglottis (laryngeal surface)
- C32.2 Subglottis
- C32.8 Overlapping lesion of larynx
- C32.9 Larynx NOS
- ICD-O-3 Histology Code Ranges
- 8000-8576, 8940-8950, 8980-8981

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AJCC CANCER STAGE: LARYNX CLASSIFICATION

- Clinical staging
- Evidence prior to treatment
- Nasolaryngoscopy
- Laryngeal tumor biopsy
- Radiologic nodal staging to supplement clinical exam
- Microlaryngoscopy

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AJCC CANCER STAGE: LARYNX CLASSIFICATION

- Pathologic staging
- Evidence obtained in clinical staging and in histologic study of surgically resected specimen
- Lymphadenectomy description describes size, number, and position of involved nodes and presence or absence of extracapsular spread (ECS)

- T Category
- TX: Primary tumor cannot be assessed
- T0: No evidence of primary tumor
- Tis: Carcinoma in situ

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AJCC CANCER STAGE: LARYNX

- T Category Supraglottis
- T1: Limited to 1 subsite of supraglottis with normal vocal cord mobility
- T2: Invades mucosa of more than 1 adjacent subsite of supraglottis or glottis or region outside the supraglottis without fixation of larynx

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AJCC CANCER STAGE: LARYNX

- T Category Supraglottis
- T3: Limited to larynx with vocal cord fixation and/or invades any of the following: postcricoid area, preepiglottic space, paraglottic space, and/or inner cortex of thyroid cartilage
- 14a: Moderately advanced local disease. Invades through the thyroid cartilage and/or invades tissues beyond the larynx
 14b: Value and the selection of the selection of
- T4b: Very advanced local disease. Invades prevertebral space, encases carotid artery, or invades mediastinal structures

- T Category Glottis
- T1: Limited to vocal cords with normal mobility
- T1a: Limited to 1 vocal cord
- T1b: Involves both vocal cords
- T2: Extends to supraglottis and/or subglottis, and/or with impaired vocal cord mobility

AJCC CANCER STAGE: LARYNX

- T Category Glottis
- T3: Limited to larynx with vocal cord fixation and/or invasion of paraglottic space, and/or inner cortex of thyroid cartilage
- T4a: Moderately advanced local disease. Invades through outer cortex of thyroid cartilage and/or invades tissues beyond the larynx
- T4b: Very advanced local disease. Invades prevertebral space, encases carotid artery, or invades mediastinal structures

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AJCC CANCER STAGE: LARYNX

- T Category Subglottis
- T1: Limited to 1 subglottis
- T2: Extends to vocal cord(s) with normal or impaired mobility
- T3: Limited to larynx with vocal cord fixation

- T Category Subglottis
- 14a: Moderately advanced local disease. Invades through cricoid or thyroid cartilage and/or invades tissues beyond the larynx
- T4b: Very advanced local disease. Invades prevertebral space, encases carotid artery, or invades mediastinal structures

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AJCC CANCER STAGE: LARYNX

- N Category:
- NX: Regional lymph nodes cannot be assessed
- NO: No regional lymph node metastasis
- N1: Metastasis in single ipsilateral lymph node, 3 cm or less in greatest dimension
- N2: Metastasis in single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension, or in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension, or in bilateral or contralateral lymph nodes, none more than 6 cm in dimension

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AJCC CANCER STAGE: LARYNX

- N Category:
- N2a: Metastasis in single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension
- N2b: Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension
- N2c: Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in dimension
- N3: Metastasis in a lymph node, more than 6 cm in greatest dimension

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AJCC CANCER STAGE: LARYNX M Category Mo: No distant metastasis M1: Distant metastasis

Group	T	N	M	
Stage 0	Tis	N0	M0	
Stage I	T1	N0	M0	
Stage II	T2	N0	M0	
Stage III	T3 T1 T2 T3	N0 N1 N1 N1	M0 M0 M0 M0	

Group	T	N	М
Stage IVA	T4a	N0	M0
	T4a	N1	M0
	T1	N2	M0
	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
Stage IVB	T4b	Any N	M0
	Any T	N3	M0
Stage IVC	Any T	Any N	M1

POP QUIZ

- 1/8/15 Nasolaryngoscopy with biopsy: Small tumor of left vocal cord, confined to vocal cord, squamous cell carcinoma
- 1/14/15 CT of neck and chest: No lymphadenopathy; lungs within normal limits
- 1/28/15 Hemilaryngectomy: Squamous cell carcinoma in situ, right vocal cord; squamous cell carcinoma, left vocal cord

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POP QUIZ

- What is the AJCC clinical stage?
 cT1a cN0 cM0 Stage I
- What is the AJCC pathologic stage?pT1b pN_pM_Stage 99

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Summary Stage 2000 http://seer.cancer.gov/tools/ssm/

LARYNX: GLOTTIS C32.0

SUMMARY STAGE 2000: GLOTTIS

- 0 In situ
- · Noninvasive; intraepithelial
- 1 Localized only
- Confined to glottis

- Intrinsic larynx
 Laryngeal commissure(s): Anterior; posterior
 Vocal cord(s): True cord(s), true vocal cord(s)
 Invasive tumor WITH or WITHOUT normal vocal cord mobility
- One vocal cord; both vocal cords

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SUMMARY STAGE 2000: GLOTTIS

- 1 Localized only
- Tumor involves adjacent region(s) of larynx
- Subglottis; supraglottis [false vocal cord(s)]
- · Tumor limited to larynx WITH vocal cord fixation
- Involvement of intrinsic muscle(s)
- Aryepiglottic
- Corniculate tubercle; cuneform tubercle
- Arytenoid; cricoarytenoid; cricothyroid; thyroarytenoid; thyroepiglottic; vocalis
- · Localized NOS

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SUMMARY STAGE 2000: GLOTTIS

- 2 Regional by direct extension only
- · Extension to:
- Base of tongue
- Hypopharynx NOS
- Postcricoid area
- Pre-epiglottic tissues
- Pyriform sinus (pyriform fossa)
- Vallecula

SUMMARY STAGE 2000: GLOTTIS

- 3 Regional lymph node(s) involved only
- Anterior deep cervical (laterotracheal) (recurrent laryngeal)
- Paralaryngeal
- Paratracheal
- · Prelaryngeal: Delphian node
- Pretracheal
- Cervical NOS

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SUMMARY STAGE 2000: GLOTTIS

- · 3 Regional lymph node(s) involved only
- Internal jugular, NOS:
- Deep cervical, NOS:
- Lower NOS
- Jugulo-omohyoid (supraomohyoid)
- Middle
- Upper NOS
- Jugulodigastric (subdigastric)

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SUMMARY STAGE 2000: GLOTTIS

- 3 Regional lymph node(s) involved only
- Mandibular NOS
- Submandibular (submaxillary)
- Submental
- Retropharyngeal
- Regional lymph node(s) NOS

SUMMARY STAGE 2000: GLOTTIS

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- Codes 2 + 3
- 5 Regional NOS

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SUMMARY STAGE 2000: GLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Distant lymph node(s)
- Mediastinal
- Supraclavicular (transverse cervical)
- Other distant lymph node(s)

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SUMMARY STAGE 2000: GLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Extension to/through
- Cervical (upper) esophagus; cricoid cartilage; extrinsic (strap) muscles (omohyoid, sternohyoid, sternothyroid, thyrohyoid); oropharynx; skin; soft tissues of neck; thyroid cartilage; thyroid gland; trachea
- Further contiguous extension
- Metastasis
- 9 Unknown if extension or metastasis

Summary Stage 2000 http://seer.cancer.gov/tools/ssm/

LARYNX: SUPRAGLOTTIS C32.1

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 0 In situ
- · Noninvasive; intraepithelial
- 1 Localized only
- Invasive tumor with normal vocal cord mobility confined to
- Conlined 10

 Supraglottis (1 subsite): Aryepiglottic fold; arytenoid cartilage; comiculate cartilage; cuneiform cartilage; epilarynx NOS; false cord(s): ventricular band(s), ventricular cavity, vestibular fold; infrahyoid epiglottis; laryngeal cartilage NOS; laryngeal (posterior) surface of epiglottis; suprhyoid epiglottis; (including tip, lingual {anterior} and laryngeal surfaces)

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 1 Localized only
- Impaired vocal cord mobility
- Tumor involves adjacent region(s) of larynx
- Tumor involves more than one subsite of supraglottis WITHOUT fixation or NOS
- Tumor limited to larynx WITH vocal cord fixation
- Localized NOS

SUMMARY STAGE 2000: SUPRAGLOTTIS

- 2 Regional by direct extension only
- Extension to
- Base of tongue including mucosa
- Cricoid cartilage
- Hypopharynx NOS
- Postcricoid area
- Pre-epiglottic tissues
- Pyriform sinus (pyriform fossa)
- Vallecula

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 3 Regional lymph node(s) involved only
- Anterior deep cervical (laterotracheal) (recurrent laryngeal)
- Paralaryngeal
- Paratracheal
- · Prelaryngeal: Delphian node
- Pretracheal
- Cervical NOS

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 3 Regional lymph node(s) involved only
- Internal jugular, NOS:
- Deep cervical, NOS:
- Middle
- Upper NOS
- Jugulodigastric (subdigastric)

SUMMARY STAGE 2000: SUPRAGLOTTIS

- 3 Regional lymph node(s) involved only
- Mandibular NOS
- Submandibular (submaxillary)
- Submental
- Retropharyngeal
- Regional lymph node(s) NOS

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- Codes 2 + 3
- 5 Regional NOS

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SUMMARY STAGE 2000: SUPRAGLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Distant lymph node(s)
- Mediastinal
- Supraclavicular (transverse cervical)
- Other distant lymph node(s)

SUMMARY STAGE 2000: SUPRAGLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Extension to/through
- Cervical esophagus; extrinsic (strap) muscles (omohyoid, sternohyoid, sternothyroid, thyrohyoid); oropharynx; skin; soft tissues of neck; thyroid cartilage; thyroid gland
- Further contiguous extension
- Metastasis
- 9 Unknown if extension or metastasis

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Summary Stage 2000 http://seer.cancer.gov/tools/ssm/

LARYNX: SUBGLOTTIS C32.2

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SUMMARY STAGE 2000: SUBGLOTTIS

- 0 In situ
- Noninvasive; intraepithelial
- 1 Localized only
- Invasive tumor with normal vocal cord mobility confined to subglottis
- Tumor involves adjacent region(s) of larynx
- Vocal cords with normal or impaired mobility
- Tumor limited to larynx WITH vocal cord fixation
- Localized NOS

SUMMARY STAGE 2000: SUBGLOTTIS

- 2 Regional by direct extension only
- Extension to:
- Base of tongue
- Hypopharynx NOS
- Postcricoid area
- Pre-epiglottic tissues
- · Pyriform sinus (pyriform fossa)
- Vallecula

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SUMMARY STAGE 2000: SUBGLOTTIS

- 3 Regional lymph node(s) involved only
- · Anterior deep cervical (laterotracheal) (recurrent laryngeal)
- Paralaryngeal
- Paratracheal
- · Prelaryngeal: Delphian node
- Pretracheal
- Cervical NOS

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SUMMARY STAGE 2000: SUBGLOTTIS

- 3 Regional lymph node(s) involved only
- Internal jugular, NOS:
- Deep cervical, NOS:
- Lower NOS
- · Jugulo-omohyoid (supraomohyoid)
- Middle
- Mandibular NOS
- Submandibular (submaxillary)
- Submental
- Retropharyngeal

SUMMARY STAGE 2000: SUBGLOTTIS

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- Codes 2 + 3
- 5 Regional NOS

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SUMMARY STAGE 2000: SUBGLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Distant lymph node(s)
- Mediastinal
- Supraclavicular (transverse cervical)
- Other distant lymph node(s)

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SUMMARY STAGE 2000: SUBGLOTTIS

- 7 Distant site(s)/lymph node(s) involved
- Extension to/through
- Cervical (upper) esophagus; cricoid cartilage; extrinsic (strap) muscles (omohyoid, sternohyoid, sternothyroid, thyrohyoid); oropharynx; skin; soft tissues of neck; thyroid cartilage; thyroid gland; trachea
- Further contiguous extension
- Metastasis
- 9 Unknown if extension or metastasis

Summary Stage 2000 http://seer.cancer.gov/tools/ssm/

LARYNX: OVERLAPPING LESION OR NOS C32.3, C32.8, C32.9

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SUMMARY STAGE 2000: LARYNX OTHER

- 0 In situ
- Noninvasive; intraepithelial
- 1 Localized only
- Invasive tumor confined to site of origin
- Impaired vocal cord mobility
- Tumor involves adjacent region(s) of larynx
- Tumor limited to larynx WITH vocal cord fixation
- Localized NOS

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SUMMARY STAGE 2000: LARYNX OTHER

- 2 Regional by direct extension only
- Extension to:
- Hypopharynx NOS
- Postcricoid area
- Pre-epiglottic tissues
- Pyriform sinus (pyriform fossa)
- Vallecula

SUMMARY STAGE 2000: LARYNX OTHER

- 3 Regional lymph node(s) involved only
- Anterior deep cervical (laterotracheal) (recurrent laryngeal)
- Paralaryngeal
- Paratracheal
- · Prelaryngeal: Delphian node
- Pretracheal
- Cervical NOS

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SUMMARY STAGE 2000: LARYNX OTHER

- · 3 Regional lymph node(s) involved only
- Internal jugular, NOS
- Deep cervical, NOS
- Lower NOS
- · Jugulo-omohyoid (supraomohyoid)
- Middle
- Upper NOS
- Jugulodigastric (subdigastric)

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SUMMARY STAGE 2000: LARYNX OTHER

- •3 Regional lymph node(s) involved only
- Mandibular NOS
- Submandibular (submaxillary)
- Submental
- Retropharyngeal
- Regional lymph node(s) NOS

SUMMARY STAGE 2000: LARYNX OTHER

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- Codes 2 + 3
- 5 Regional NOS

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SUMMARY STAGE 2000: LARYNX OTHER

- 7 Distant site(s)/lymph node(s) involved
- Distant lymph node(s)
- Mediastinal
- Supraclavicular (transverse cervical)
- Other distant lymph node(s)

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SUMMARY STAGE 2000: LARYNX OTHER

- 7 Distant site(s)/lymph node(s) involved
- Extension to/through
- Cervical (upper) esophagus; cricoid cartilage; extrinsic (strap) muscles (omohyoid, sternohyoid, sternothyroid, thyrohyoid); oropharynx; skin; soft tissues of neck; thyroid cartilage; thyroid gland; trachea
- Further contiguous extension
- Metastasis
- 9 Unknown if extension or metastasis

POP QUIZ

 Radical laryngectomy and bilateral neck dissection: 2 cm poorly differentiated verrucous carcinoma of epiglottis extends into and through thyroid cartilage with microinvasion of the thyroid; 36 lymph nodes removed; 1 malignant ipsilateral cervical node

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POP QUIZ

- What is the Summary Stage 2000?
- a. O In situ
- b. 1 Localized only
- c. 2 Regional by direct extension only
- d. 3 Regional lymph node(s) involved only
- e. 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- f. 5 Regional NOS
- ☆g. 7 Distant site(s)/lymph node(s) involved

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Larynx

COLLABORATIVE STAGE DATA COLLECTION SYSTEM (CS) V0205

CS SCHEMAS

- LarynxGlottic
- C32.0
- LarynxSupraglottic
- · C32.1
- LarynxSubglottic
- · C32.2
- LarynxOther
- C32.3, C32.8, C32.9

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SSF1: SIZE OF LYMPH NODES

- Code largest diameter of involved regional nodes
- Clinical assessment
- Code size as described in clinical or radiographic exam
- Pathologic assessment
- · Code size as described on pathology report

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SSF3 – SSF6: LYMPH NODE LEVELS FOR HEAD AND NECK

- SSF 3: Levels I-III
- SSF 4: Levels IV, V, retropharyngeal nodes
- SSF 5: Levels VI, VII, facial nodes
- SSF 6: Parapharyngeal, parotid, and suboccipital/retroauricular nodes

SSF3 - SSF6: NODE LEVELS

- · Code presence or absence of node involvement
- One digit used to represent lymph nodes of a single level
- If you only have information about one level of lymph nodes, code all other lymph levels as 0
- If you know regional lymph nodes are positive but the lymph node level is unknown, code 000
- If no lymph nodes are involved clinically or pathologically, code 000

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SSF9: EXTRACAPSULAR EXTENSION PATHOLOGICALLY, LYMPH NODES

- Extracapsular extension
- Tumor within lymph nodes extends beyond the wall of the node into the perinodal fat
- Macroscopic
- May be described in gross dissection
- Takes priority over microscopic description
- Microscopic
- May not be evident in gross exam
- · Described in microscopic section of path report

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Larynx

DIAGNOSIS AND TREATMENT

TREATMENT-LARYNX

- Two categories
- Supraglottic
- Glottic
- No standardized NCCN guidelines for subglottic primaries because they are so rare

EARLY STAGE

- In situ
- Endoscopic removal
- Stripping
- · Radiation therapy
- Clinical T1-T2, N0, or select T3's
- Radiation
- Partial larynx preserving endoscopic surgery
- · Radiation and/or chemotherapy if adverse features

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CT3 N0-1

- Concurrent systemic therapy or radiation
 If residual tumor, then may have a neck dissection
 if clinical N1 prior to therapy, they will do clinical assessment
 4-8 weeks after therapy completed. If this is positive they will do a neck dissection.
- · Laryngectomy with ipsilateral thyroidectomy
- Neck dissection if cN1
 Salvage surgery and neck dissection if residual tumor of the primary site
- Induction chemotherapy
- Clinical trials

SURGERY

- · Hemilaryngectomy (30)
- Left or right half of larynx including thyroid cartilage, false cord, ventricle, and true vocal cord.
- Partial laryngectomy (30)
- Part of thyroid cartilage and corresponding portions of laryngeal mucosa.
- Supraglottic laryngectomy (33)
 Part of larynx superior to the true vocal cord (transection through the ventricles).
- Total laryngectomy (41)
- Entire larynx.
- · Radical laryngectomy (42)
- VACCR Entire Larynx and adjacent sites

SURGERY

- Unresectable tumor
- $\boldsymbol{\cdot}$ Surgeon does not feel they can remove all gross
- · Local control of the tumor will not be achieved
- · Salvage surgery
- Patients who do not have a complete clinical response to chemotherapy or radiation may have salvage surgery

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CT3 N2-3

- Concurrent systemic therapy or radiation
- If residual tumor, then may have a neck dissection
- Will do clinical post treatment assessment 4-8 weeks after therapy completed. If this is positive they will do a neck dissection.
- Laryngectomy with ipsilateral thyroidectomy
- Néck dissection if cN1
- Salvage surgery and neck dissection if residual tumor of the primary site
- Induction chemotherapy
- Clinical trials

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• Total laryngectomy with thyroidectomy and neck dissection if indicated followed by adjuvant radiation and/or chemotherapy

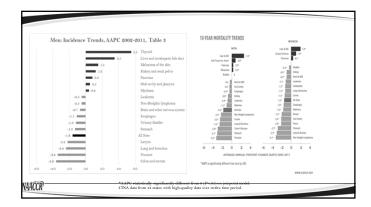
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EPI MOMENT NAACCR²

EPIDEMIOLOGY OF LARYNX CANCER

- Analyzed in Head & Neck Group or alone
- Rare, 3.2 per 100,000 (mortality 1.1 per 100,000)
- 5-year survival 61%
- Ninee anatomic subsites (differ in etiology, tx, and survival)
 Glottic & supraglottic (Majority of tumors)
 Subglottic

- Predominately squamous
- Incidence 6 times higher in men than women
 Higher in blacks than whites
- Etiology unclear
 Risk factors—tobacco, alcohol, poor nutrition, workplace exposures



EPIDEMIOLOGY OF THYROID CANCER

- Analyzed alone (although subsite of Endocrine System)
- Rare, 13.5 per 100,000 (mortality 0.5 per 100,000)
- Survival high, 5-year survival 98%

- 4 major histologies
 75-80% are papillary
 15% are follicular
 5% medullary or anaplastic
- Incidence 3x higher in women

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- Etiology unclear
 Risk factors—high dose ionizing radiation (rx tx may increase risk)
 Risk factors—hx of thyroid conditions
 Highest rades in Lecland, Philippines, Hawai'i and in Filipino immigrant populations in us (LA and Hawai'i)

THYROID, 2007-2011, WOMEN Mortality

CURRENT CINA RESEARCH

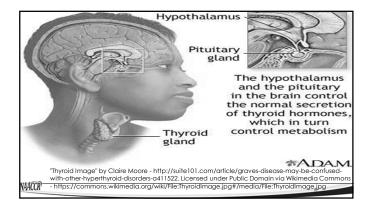
- · Medullary thyroid carcinoma (MTC)
- FDA required study
- Monitor number of new MTC cases to identify any potential increase of MTC due to specific drugs for type 2 diabetes
- liraglutide, exenatide once-weekly, or other GLP-1 receptor agonists
- No current research specifically for laryngeal cancers

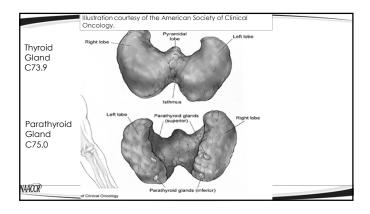
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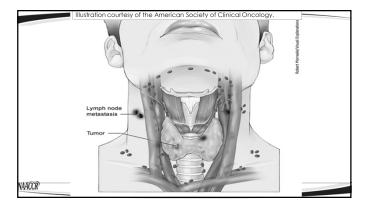
Quiz 1

QUESTIONS?

THYROID NAGOR

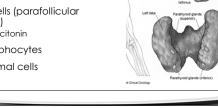






THYROID HISTOLOGY

- Follicular cells
- Thyroid hormone (thyroxine + triiodthyroxine)
- · C cells (parafollicular cells)
- Calcitonin
- Lymphocytes
- Stromal cells



THYROID HISTOLOGY

- Main histologic typesDifferentiated –10 year survival is 93%
 - Papillary (80%)
- Follicular (11%)
 Hurthle (3%)
 Medullary (4%)-10 year survival is 85%
- Anaplastic (2%)-10 year survival is 76%

*Based on 53,856 patients treated for thyroid cancer between 1985 and 1995

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Required Histology	Combined with	Combination Term	Code
Papillary and Follicular		Papillary carcinoma, follicular variant	8340
Medullary	Follicular	Mixed medullary follicular carcinoma	8346
Medullary	Papillary	Mixed medullary papillary carcinoma	8347

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• How many primaries should be reported when a complete thyroidectomy specimen shows two tumors: 1.8 cm papillary carcinoma with tall cell features (8344/3) and a 0.4 cm papillary thyroid carcinoma (8260/3)?

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QUESTION

- Is papillary thyroid carcinoma an NOS histology qualifying for rule M16, thus leading to a single primary, or would M17 apply (multiple primaries)?
- The histology codes are different at the second digit (8260 and 8344)?
- While rule M16 doesn't include papillary thyroid carcinoma in the listed histologies, it seems like it may be an NOS histology for the thyroid. In addition, code 8260/3 is listed as NOS in the ICD-O-3.

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ANSWER

- Apply rule M16 and abstract a single primary.
- These two thyroid tumors, one papillary carcinoma with tall cell features (8344/3) and one papillary thyroid carcinoma, fit the criteria for rule M16, although not explicitly listed there.
- We will clarify this in the next version of the rules.

SEER SINQ 20140083

AJCC Cancer Stage

THYROID: CHAPTER 8

AJCC CANCER STAGE: THYROID

- ICD-O-3 Topography Codes
- C73.9
- ICD-O-3 Histology Code Ranges
- 8000-8576, 8940-8950, 8980-8981

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AJCC CANCER STAGE: THYROID CLASSIFICATION

- Clinical staging
- Evidence prior to treatment
- Inspection and palpation of thyroid gland and regional lymph nodes
- Laryngoscopy
- Thyroid gland tumor biopsy
- Imaging
- Pathologic staging
- Evidence obtained in clinical staging and in histologic study of surgically resected specimen

AJCC CANCER STAGE: THYROID

- T Category
- TX: Primary tumor cannot be assessed
- T0: No evidence of primary tumor
- T1: 2 cm or less in greatest dimension limited to thyroid
- Tla: 1 cm or less, limited to thyroid
- T1b: More than 1 cm but not more than 2 cm in greatest dimension, limited to thyroid
- T2: More than 2 cm but not more than 4 cm in greatest dimension limited to thyroid

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AJCC CANCER STAGE: THYROID

- T Category
- T3: More than 4 cm in greatest dimension limited to thyroid or any tumor with minimal extrathyroid extension
- T4a: Moderately advanced disease. Any size extending beyond thyroid capsule to invade subcutaneous soft tissues, larynx, trachea, esophagus, or recurrent laryngeal nerve
- T4b: Very advanced disease. Invades prevertebral fascia or encases carotid artery or mediastinal vessels

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AJCC CANCER STAGE: THYROID

T Category

All anaplastic carcinomas are considered T4

- T4a: Intrathyroidal anaplastic carcinoma
- T4b: Anaplastic carcinoma with gross extrathyroid extension

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AJCC CANCER STAGE: THYROID

- Descriptors to subdivide T categories
- Solitary tumor (s)
- Multifocal tumor (m)

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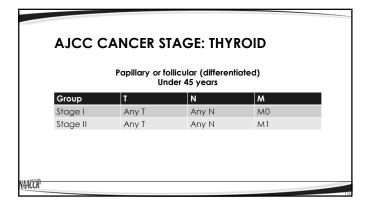
AJCC CANCER STAGE: THYROID

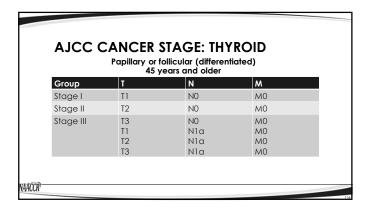
- N Category:
- NX: Regional lymph nodes cannot be assessed
- NO: No regional lymph node metastasis
- No Negional lymph node metastasis
 N1a: Metastasis to Level VI (pretracheal, paratracheal, and prelaryngeal/Delphian) lymph nodes
- N1b: Metastasis to unilateral, bilateral, or contralateral cervical (Levels I, II, III, IV, or V) or retropharyngeal or superior mediastinal lymph nodes (Level VII)

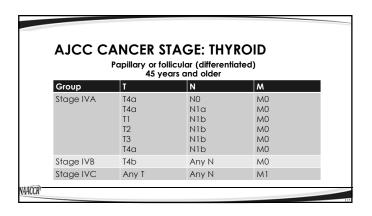
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AJCC CANCER STAGE: THYROID

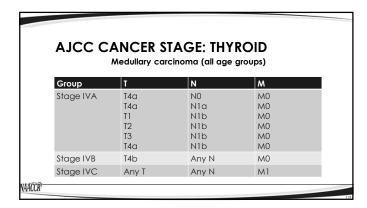
- M Category
- M0: No distant metastasis
- M1: Distant metastasis

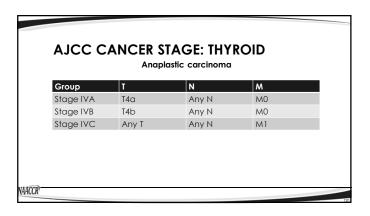






AJCC CANCER STAGE: THYROID Medullary carcinoma (all age groups)						
Group	Ī	N	M			
Stage I	T1	N0	MO			
Stage II	T2 T3	N0 N0	M0 M0			
Stage III	T1 T2 T3	Nla Nla Nla	M0 M0 M0			





POP QUIZ

- 2/2/15 50 year old white female with palpable thyroid mass
- 2/2/15 CT of neck and chest: Right lobe thyroid lesion, 3.5 cm; no lymphadenopathy; no lung abnormalities
- 2/4/15 Needle biopsy, thyroid: Papillary carcinoma, moderately differentiated
- 2/18/15 Thyroidectomy with lymph node sampling: 3.5 cm papillary carcinoma, moderately differentiated, of thyroid extends into the cricothyroid and interior pharyngeal constrictor muscles. 1 Delphian node positive of 5 nodes removed

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POP QUIZ

- What is the AJCC clinical stage?
 cT2 cN0 cM0 Stage II
- · What is the AJCC pathologic stage?
- pT4a pN1a pM_ Stage IVa

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Summary Stage 2000 http://seer.cancer.gov/tools/ssm/

THYROID C73.9

SUMMARY STAGE 2000: THYROID

- 0 In situ
- Noninvasive; intraepithelial
- 1 Localized only
- Single or multifocal invasive tumor(s) confined to thyroid
- · Into or through thyroid capsule, but not beyond
- Localized NOS

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SUMMARY STAGE 2000: THYROID

- 2 Regional by direct extension only
- Extension to
- · Blood vessel(s) (major)
- Carotid artery; jugular vein; thyroid artery or vein
- Cricoid cartilage
- Esophagus
- Larynx
- Nerves
- · Recurrent laryngeal; vagus

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SUMMARY STAGE 2000: THYROID

- 2 Regional by direct extension only
- Extension to
- Parathyroid
- · Pericapsular soft/connective tissue
- Sternocleidomastoid muscle
- $\bullet \ \mathsf{Strap} \ \mathsf{muscle(s):} \ \mathsf{Omohyoid}, \ \mathsf{sternohyoid}, \ \mathsf{sternothyroid}$
- Thyroid cartilage
- Tumor is described as "FIXED to adjacent tissues"

IAACCR

SUMMARY STAGE 2000: THYROID

- 3 Regional lymph node(s) involved only
- Anterior deep cervical (laterotracheal) (recurrent laryngeal)
- Paralaryngeal
- Paratracheal
- · Prelaryngeal: Delphian node
- Pretracheal
- Cervical NOS

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SUMMARY STAGE 2000: THYROID

- · 3 Regional lymph node(s) involved only
- Internal jugular, NOS
- Deep cervical, NOS
- Lower NOS
- Jugulo-omohyoid (supraomohyoid)
- Middle

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SUMMARY STAGE 2000: THYROID

- 3 Regional lymph node(s) involved only
- Mediastinal NOS
- Posterior mediastinal (tracheoesophageal); upper anterior mediastinal
- Retropharyngeal
- · Spinal accessory (posterior cervical)
- Supraclavicular (transverse cervical)
- · Regional lymph node(s) NOS

SUMMARY STAGE 2000: THYROID

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- Codes 2 + 3
- 5 Regional NOS

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SUMMARY STAGE 2000: THYROID

- 7 Distant site(s)/lymph node(s) involved
- Distant lymph node(s)
- Mandibular
- Submandibular (submaxillary); submental
- Other distant lymph node(s)

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SUMMARY STAGE 2000: THYROID

- 7 Distant site(s)/lymph node(s) involved
- Extension to: Bone; mediastinal tissues; skeletal muscle, other than strap or sternocleidomastoid muscle; trachea
- Further contiguous extension
- Metastasis
- 9 Unknown if extension or metastasis

POP QUIZ

- 2/2/15 50 year old white female with palpable thyroid mass
- 2/2/15 CT of neck and chest: Right lobe thyroid lesion, 3.5 cm; no lymphadenopathy; no lung abnormalities
- 2/4/15 Needle biopsy, thyroid: Papillary carcinoma, moderately differentiated
- 2/18/15 Thyroidectomy with lymph node sampling: 3.5 cm papillary carcinoma, moderately differentiated, of thyroid extends into the cricothyroid and interior pharyngeal constrictor muscles. 1 Delphian node positive of 5 nodes removed

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POP QUIZ

- What is the Summary Stage 2000?
- a. 0 In situ
- b. 1 Localized only
- c. 2 Regional by direct extension only
- d. 3 Regional lymph node(s) involved only
- e. 4 Regional by BOTH direct extension AND regional lymph node(s) involved
- f. 5 Regional NOS
- g. 7 Distant site(s)/lymph node(s) involved

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CS V0205 THYROID C73.9

SSF1: SOLITARY VS. MULTIFOCAL TUMOR

Record whether thyroid cancer is solitary tumor or multifocal

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Thyroid

DIAGNOSIS AND TREATMENT

NAACCR[®]

DIAGNOSING THYROID CANCER

- Physical exam
- Blood tests
- · Check levels of thyroid-stimulating hormone (TSH)
- · Check levels of calcitonin

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DIAGNOSING THYROID CANCER

- Imaging
- Ultrasound
- · Radioiodine (thyroid) scan
- Positron emission tomography (PET) scan
- Octreotide scan
- Biopsy
- Fine-needle aspiration
- Surgical

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THYROID NODULES

- Hot nodule
- Absorbs iodine on thyroid scan
- · Cold Nodule
- Does not absorb iodine on thyroid scan



NAACCR[®]

TREATMENT FOR PAPILLARY AND FOLLICULAR CARCINOMA

- Surgery
- Ipsilateral lobectomy plus isthmusectomy (23)
- Total thyroidectomy (50)
- Completion thyroidectomy (50)
- lodine-131 (I-131 or RAI)
- Unresectable tumors
- Post thyroidectomy
- Radiation Treatment Volume should be coded to 33-Whole Body

TREATMENT FOR PAPILLARY AND FOLLICULAR CARCINOMA

- External Beam Radiation
- May be done with 131 I treatment for locoregional recurrence.
- May be used as adjuvant therapy if tumor does not show uptake of iodine

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THYROXIN SUPPRESSION OF THYROID STIMULATING HORMONE (TSH)

- Synthroid should be coded as hormonal treatment for thyroid cancer.
- This drug has two benefits:
- It supplies the missing hormone the thyroid would normally produce
- It suppresses the production of thyroid-simulating hormone (TSH) from the pituitary gland. High TSH levels could conceivably stimulate any remaining cancer cells to grow.

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QUESTION

 If a patient is taking Synthroid prior to being diagnosed with thyroid cancer and having total thyroidectomy, is Synthroid still coded as hormone therapy 1st course of treatment after cancer directed surgery?

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 Yes, it is still considered 1st course treatment and the date of treatment would be the date of the patient's diagnosis of the thyroid malignancy.

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TREATMENT

- Medullary Carcinoma
- Total thyroidectomy and bilateral central neck dissection (level VI)
- External beam radiation
- · Anaplastic Carcinoma
- Surgery if localized
- External beam radiation
- Chemotherapy

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Quiz 2

QUESTIONS?

COMING UP...

- Collecting Cancer Data: Pancreas
- 6/4/15
- Survivorship Care Plans
- 7/9/15

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AND THE WINNERS ARE.....

CE CERTIFICATE QUIZ/SURVEY

- Phrase
- Link
- http://www.surveygizmo.com/s3/2127403/Larynx-and-Thyroid-2015

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