

SURGICAL PATHOLOGY REVISED REPORT

Case Number:

*Carcinoma, squamous cell
08670/3 NOS
Site Supraglottis C32.1
JW 5/21/13*

Diagnosis:

A: Nerve, pharyngeal plexus, biopsy

- Skeletal muscle, fibroadipose connective tissue and nerve
- No malignancy identified

B: Lymph nodes, left, level 2, regional node dissection

- 2 of 14 lymph nodes positive for metastatic squamous cell carcinoma, 1.8 cm in greatest dimension with extracapsular extension (2/14)

C: Lymph nodes, left neck level 3, regional node dissection

- 3 of 13 lymph nodes positive for metastatic squamous cell carcinoma, size 2.8 cm in greatest dimension with extracapsular extension (3/13)

D: Lymph nodes, left neck, level 4, regional node dissection

- 13 lymph nodes negative for metastatic carcinoma (0/13)

E: Lymph nodes, right neck level 2, regional node dissection

- 2 of 8 lymph nodes positive for metastatic squamous cell carcinoma, size 3.2 cm in greatest dimension without extracapsular extension (2/8)

F: Lymph nodes, right neck level 3, regional node dissection

- 1 of 15 lymph nodes positive for metastatic squamous cell carcinoma, size 2.4 cm in greatest dimension with no extracapsular extension (1/15)

G: Lymph nodes, right neck, level 4, regional node dissection

- 1 of 24 lymph nodes positive for metastatic squamous cell carcinoma, 3 mm in greatest dimension with no extracapsular extension (1/24)

- Thyroid epithelium also present within subcapsular sinus of 2 lymph nodes, cannot exclude metastatic thyroid carcinoma (see comment)

H: Larynx, laryngectomy

Tumor histologic type/subtype: invasive squamous cell carcinoma

Histologic grade: moderately differentiated

Location of primary site: Bilateral supraglottis, involving



bilateral false cords and bilateral aryepiglottic folds, extending focally into left glottis, anteriorly into epiglottis involving epiglottic cartilage, and anteriorly into hyoid bone. Invasive carcinoma abuts but does not involve bilateral strap muscles. The vallecula is negative.

Size: 3.9 x 3.8 x 1.6 cm per gross measurement

Extent of invasion:

Angiolymphatic: not identified; however, multiple lymph nodes are positive in subsequently submitted sections

Adjacent subsite: not applicable

Vocal cord fixation: not identified

Into/through cartilage: invasive carcinoma invades epiglottic cartilage but not thyroid cartilage

Outside the larynx: tumor involves hyoid bone

P16 IHC status: pending (H3)

HR HPV ISH status: pending (H3)

In situ carcinoma: present

Surgical Margins: Negative but very close (<1 mm) from blue inked right margin. Black inked left margin is 2 mm from the invasive carcinoma and anterior is 6 mm from invasive carcinoma. Inferior tracheal margin is negative.

Mucosal margins are negative for squamous cell carcinoma in situ.

Lymph nodes: see additional sections

Other significant findings:

- Perineural invasion present

AJCC PATHOLOGIC TNM STAGE: pT4a pN2c pMx

NOTE: This pathologic stage assessment is based on information available at the time of this report, and is subject to change pending clinical review and additional information.

Comment:

In specimen G, bland appearing thyroid epithelium is present in the subcapsular sinus of two lymph nodes. No parenchymal involvement is identified, and no nuclear features of papillary thyroid carcinoma are identified. This may represent benign

thyroid inclusions in lymph node; however, a metastatic carcinoma of thyroid origin cannot be excluded. Clinical evaluation and imaging of the thyroid gland is recommended.

Clinical History:

-year-old female with larynx cancer.

Gross Description:

Received are eight appropriately labeled containers.

Container A is additionally labeled "pharyngeal plexus nerve" and is an 8 x 6 x 2 mm aggregate of two red/tan soft tissue fragments, A1,

Container B is additionally labeled "left neck level 2" and consists of a 3.2 x 2.5 x 1.0 cm fragment of yellow/tan fibrofatty tissue with embedded sutures. Seven lymph node candidates up to 2.1 cm in greatest dimension are identified.

Block Summary:

B1 - Three lymph node candidates

B2 - Two lymph node candidates

B3 - One lymph node candidate, trisected

B4 - One lymph node candidate, trisected

B5-B6 - Remainder of fat,

Container C is additionally labeled "left neck level 3" and is a 5.4 x 3.5 x 1.5 cm aggregate of yellow/tan fibrofatty tissue dissected for lymph node candidates. Multiple lymph node candidates up to 2.8 cm in greatest dimension are identified.

Block Summary:

C1 - Four lymph node candidates

C2 - Four lymph node candidates

C3 - Two lymph node candidates

C4 - One lymph node candidate, sectioned

C5 - One lymph node candidate, trisected

C6 - Representative of one grossly positive lymph node candidate (largest)

Tissue remains in formalin.

Container D is additionally labeled "left level 4 neck dissection" and is a 4.4 x 2.5 x 1.2 cm fragment of cauterized fibrofatty tissue dissected for lymph node candidates. Multiple lymph node candidates up to 1.2 cm in greatest dimension are identified.

Block Summary:

D1 - Seven lymph node candidates

D2 - Two lymph node candidates

D3 - Representative section from large caliber vessel

Tissue remains in formalin.

Container E is additionally labeled "right level 2 neck dissection" and is a 4.5 x 2.8 x 1.6 cm fragment of cauterized fibrofatty tissue dissected for lymph node candidates. Four lymph node candidates up to 3.2 cm in greatest dimension are identified.

Block Summary:

E1 - Two lymph node candidates

E2 - One lymph node candidate, bisected

E3 - Representative section from largest lymph node (grossly positive)

Tissue remains in formalin.

Container F is additionally labeled "right level 3 neck dissection" and is a 5.4 x 3.7 x 1.5 cm aggregate of cauterized fibrofatty tissue and muscle. Multiple lymph node candidates up to 2.4 cm in greatest dimension are identified.

Block Summary:

F1 - Four lymph node candidates

F2 - Three lymph node candidates

F3 - One lymph node candidate, sectioned

F4 - One lymph node candidate, bisected

F5 - One lymph node candidate, bisected

F6 - Representative section of skeletal muscle

F7 - Representative section of largest, grossly positive lymph node candidate

Tissue remains in formalin.

Container G is additionally labeled "right level 4 neck dissection" and is a 4.5 x 1.9 x 1.4 cm aggregate of fibrofatty tissue, dissected for lymph node candidates. Lymph nodes up to 0.8 cm in greatest dimension are identified.

Block Summary:

G1 - Five lymph node candidates

G2 - Five lymph node candidates

G3 - Five lymph node candidates

G4 - Three lymph node candidates

Tissue remains in formalin.

Specimen H:

Specimen fixation: Formalin

Type of specimen: Total laryngectomy with attached anterior strap muscles.

Size of specimen: 8.1 cm superior to inferior, 5.2 cm right to left, 3.2 cm anterior to posterior.

Orientation of specimen: Right/blue, left/black, vallecula/yellow and anterior/midline green

Tumor description: Well demarcated, centrally ulcerated with peripherally raised firm white borders.

Location of tumor: Supraglottis involving the bilateral false cords and extending across the midline to the right and left aryepiglottic fold.

Tumor size: 3.9 cm superior to inferior x 3.8 cm right to left x 1.6 cm in thickness.

Extent of tumor: The tumor involves both right and left false cords and the anterior commissure. It extends to the right and left aryepiglottic folds and creeps up onto the epiglottis. The vallecula is grossly unremarkable. The hyoid bone is present and unremarkable. The horns of the thyroid cartilage are present and grossly unremarkable. The true cords in the subglottic region are unremarkable. The pyriform sinuses are unremarkable with the exception of undermining tumor.

Sectioning through the tumor reveals a solid white cut surface with extension into the soft tissues of the epiglottis extending anteriorly towards the vallecula (0.3 cm from the vallecula margin (H4), extension to the underlying thyroid cartilage but does not appear to invade the thyroid cartilage, the anterior neck muscles are freely movable over the tumor, bilaterally. The tumor undermines the mucosa of the right and left aryepiglottic folds. The subglottic region is grossly unremarkable. The hyoid bone is intact and the tumor is freely movable over the hyoid bone.

Distance of tumor from surgical margins: The mucosa component of the tumor comes within 0.9 cm of the right pyriform sinus margin, 1.2 cm from the left pyriform sinus margin, 2.1 cm from the anterior vallecular margin, 3.3 cm from the inferior tracheal ring margin, 0.2 cm from the blue inked right anterior

soft tissue margin, 0.3 cm from the black inked left anterior soft tissue margin, and 0.4 cm from the green inked anterior midline margin.

Description of remainder of tissue: The subglottis is lined by grossly unremarkable mucosa. The anterior strap muscles are unremarkable. No thyroid gland is identified.

Tissue submitted for special investigations: Tumor is given to tissue procurement.

Lymph nodes: Submitted separately.

Digital photograph taken: Yes

Block Summary:

Inking: right/blue, left/black, vallecula/yellow and anterior midline/green

H1 - En face tracheal margin

H2 - Perpendicular sections of right aryepiglottic fold into pyriform sinus

H3 - Perpendicular sections of left aryepiglottic fold into pyriform sinus

H4 - Epiglottis and vallecula

H5 - Right glottis

H6 - Left glottis (contains thyroid cartilage)

H7 - Anterior commissure

H8 - Perpendicular sections of green inked anterior midline, black inked left, blue inked right strap muscle margin

H9 - Remainder of right superior mucosal margin, en face

H10 - Remainder of left superior mucosal margin, en face

H11 - Perpendicular section of anterior midline hyoid bone beneath tumor (not grossly involved) (decal)

Addendum

For immunohistochemistry.

Addendum Comment

P16 is positive and HPV high risk is negative by ISH in a representative section of invasive carcinoma (H3).

TTF-1 and thyroglobulin are attempted on G3 to highlight the foci of thyroid glands within lymph nodes; however, both foci are cut through and immunohistochemistry is not contributory. The previous diagnoses are unchanged.

fw 5/15/13

Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Malignancy		
Case is (likely) QUALIFIED	✓	DISQUALIFIED
Reviewer initials	fw	Date Reviewed: 5/15/13