

## SURGICAL PATHOLOGY

Case Number : [REDACTED]

### Diagnosis:

FSA: Pharyngeal mucosal margin, left, biopsy

- Squamous mucosa and submucosal lymphoid tissue
- No dysplasia or malignancy identified

FSB: Pharyngeal mucosal margin, right, biopsy

- Squamous mucosa with submucosal chronic inflammation
- No dysplasia or malignancy identified

FSC: Inferior margin, biopsy

- Squamous mucosa with submucosal chronic inflammation
- No dysplasia or malignancy identified

D: Right cervical lymph node, Levels 2 and 5, regional dissection

- 18 lymph nodes with no metastatic carcinoma identified (0/18)

E: Right cervical lymph node, Level 3, regional dissection

- 15 lymph nodes with no metastatic carcinoma identified (0/15)

F: Right cervical lymph node, Level 4, regional dissection

- 11 lymph nodes with no metastatic carcinoma identified (0/11)

G: Left cervical lymph node, Level 3, regional dissection

- 7 lymph nodes with no metastatic carcinoma identified (0/7)

H: Left cervical lymph node, Level 4, regional dissection

- 12 lymph nodes with no metastatic carcinoma identified (0/12)

I: Left cervical lymph node, Levels 2 and 5, regional dissection

- 12 lymph nodes with no metastatic carcinoma identified (0/12)

J: Larynx, laryngectomy

Histologic tumor type/subtype: Invasive squamous cell carcinoma

Histologic grade: Moderately differentiated

Tumor size: 4.1 x 3.2 x 2.5 cm by gross measurement

Tumor extent: Invasive carcinoma involves the bilateral supraglottis

including the bilateral false cords and anterior commissure. No involvement of ventricle or true cord is identified. The tumor involves the pre- and paraepiglottic spaces, the epiglottis and extends into the base of the tongue. No involvement of thyroid cartilage or hyoid bone is identified.

Presence/absence of CIS: Present

Presence/absence of angiolymphatic space invasion: Not identified

Presence/absence of angiolymphatic perineural invasion: Not identified

Histologic assessment of surgical margins: Negative but close at right lateral soft tissue margin (<1 mm) (J12) and 1.5 mm from left lateral soft tissue margin (J13). Invasive carcinoma is 1 mm from the posterior margin, and 9 mm from anterior margin.

Lymph nodes: Five lymph nodes with no metastatic carcinoma identified in this specimen (0/5). See also previous specimens D-I

Size of largest nodal metastasis (greatest dimension): N/A

Presence/absence of extranodal extension: N/A

Other significant findings: Carcinoma in situ margins are also negative (closest is 5 mm to left). Moderate dysplasia of right tongue mucosa. Focal lingular thyroid tissue. A small amount of thyroid gland is present anterior to thyroid cartilage.

AJCC Staging:

pT3

pN0

pMx

This staging information is based on information available at the time of this report, and is subject to change pending clinical review and additional information.

Intraoperative Consult Diagnosis:

An intraoperative consultation is requested by Dr. on [REDACTED]  
from [REDACTED]

FSA1: Pharyngeal mucosal margin, left, biopsy  
- No tumor seen

FSB1: Pharyngeal mucosal margin, right, biopsy  
- No tumor seen

FSC1: Inferior margin, biopsy  
- No tumor seen

[REDACTED]

Frozen Section Pathologist:, MD

[REDACTED]:  
[REDACTED] with laryngeal cancer.

Gross Description:

Received are ten appropriately labeled containers. Containers A-C are received fresh for frozen section.

Container A holds a 4.0 x 0.7 x 0.3 cm red/tan soft tissue fragment totally submitted as FSA1, [REDACTED]

Container B holds a 1.0 x 0.7 x 0.2 cm red/tan soft tissue fragment totally submitted as FSB1, [REDACTED]

Container C holds a 1.2 x 0.5 x 0.5 cm red/tan soft tissue totally submitted as FSC1, [REDACTED]

Container D is additionally labeled "right cervical node, Level 2 and 5." It holds an aggregate of yellow/tan fibrofatty tissue measuring 4.1 x 3.2 x 1.5 cm. The tissue is dissected for lymph node candidates and 13 lymph node candidates are found ranging in size from 0.4 to 2.1 cm in diameter.

Block summary:

D1 - four lymph node candidates  
D2 - four lymph node candidates  
D3 - three lymph node candidates  
D4 - one lymph node candidate, bisected  
D5,D6 - one lymph node candidate, bisected

Container E is additionally labeled "right cervical node Level 3." It holds an aggregate of yellow/tan fibrofatty tissue measuring 4.5 x 3.2 x 1.5 cm. The tissue is dissected for lymph node candidates and sixteen lymph node candidates are found ranging in size from 0.4 to 2.3 cm in diameter.

Block summary:

E1 - seven lymph node candidates  
E2 - three lymph node candidates  
E3 - four lymph node candidates  
E4 - one lymph node candidate  
E5 - one lymph node candidate, bisected

Container F is additionally labeled "right cervical node Level 4." It holds a yellow/tan fibrofatty tissue aggregate measuring 5.2 x 4.1 x 0.8 cm. The tissue is dissected for lymph node candidates and twelve lymph node candidates are found ranging in size from 0.3 to 1.8 cm in diameter.

Block summary:

F1 - five lymph node candidates  
F2 - four lymph node candidates  
F3 - two lymph node candidates  
F4 - one lymph node candidate

Container G is additionally labeled "left cervical node, Level 3." It holds an aggregate of yellow/tan fibrofatty tissue measuring 4.8 x 4.6 x 1.2 cm. The tissue is dissected for lymph node candidates. Seven lymph node candidates are found ranging in size from 0.4 to 2.6 cm in diameter.

Block summary:

- G1 - three lymph node candidates
- G2 - one lymph node candidate
- G3 - one lymph node candidate, bisected
- G4 - one lymph node candidate, bisected
- G5 - one lymph node candidate, bisected

Container H is additionally labeled "left cervical node, Level 4." It holds an aggregate of yellow/tan fibrofatty tissue measuring 3.9 x 3.4 x 1.0 cm. The tissue is dissected for lymph node candidates and nine lymph node candidates are found ranging in size from 0.3 to 1.6 cm in diameter.

Block summary:

- H1 - four lymph node candidates
- H2 - three lymph node candidate
- H3 - one lymph node candidate
- H4 - one lymph node candidate

Container I is additionally labeled "left cervical lymph node, Levels 2 and 5." It holds an aggregate of yellow/tan fibrofatty tissue measuring 4.7 x 4.0 x 1.0 cm. The tissue is dissected for lymph node candidates. Fourteen lymph node candidates are found ranging in size from 0.2 to 3.1 cm in diameter.

Block summary:

- I1 - eight lymph node candidates
- I2 - three lymph node candidates
- I3 - two lymph node candidates
- I4,I5 - one lymph node candidate, bisected

Container J:

Specimen fixation: formalin

Type of specimen: total laryngectomy with base of tongue and anterior soft tissue

Size of specimen: The larynx measures 10.6 x 9.6 x 5.1 cm. The base of tongue mucosa measures 3.6 x 2.2 x 0.9 cm. The anterior soft tissue measures 5.2 x 2.6 x 0.9 cm on the right side.

Orientation of specimen: The right soft tissue is inked blue and the left soft tissue is inked in black.

Tumor description: The tumor is tan/white, fungating, firm and ulcerated. It is located in the supraglottic area bilaterally and involves the right false cord, pre-epiglottic space and para-epiglottic space.

Tumor size: 4.1 x 3.2 x 2.5 cm

Extent of tumor: The tumor is located bilaterally in the supraglottic area and involves the right false cord, the pre-epiglottic space and the para-epiglottic space. The tumor also involves the pyriform sinuses and aryepiglottic folds and is extending up to the epiglottis but does not involve the tip. The tumor does not appear to be grossly invading the thyroid cartilage.

Distance of tumor from surgical margins: The tumor is 1.2 cm from the tip of the epiglottis, 4.1 cm from the tracheal ring margin, 0.3 cm from the right laryngeal mucosal margin, 0.8 cm from the left laryngeal mucosal margin, 0.6 cm from the blue inked right soft tissue and tongue mucosal margin, and 0.3 cm from the black inked left soft tissue margin and tongue margin.

Description of remainder of tissue: The false cords on both the right and left are edematous. In addition, the true cord on the right is also edematous.

Tissue submitted for special investigations: no

Lymph nodes: Three lymph nodes are found within the anterior right soft tissue.

See remaining parts for additional lymph nodes.

Digital photograph taken: yes

#### Block Summary:

J1 - tracheal ring margin, en face  
J2 - right mucosal margin, perpendicular  
J3 - left mucosal margin, perpendicular  
J4 - right epiglottis, base of tongue and anterior soft tissue margin as well as extension of pre-epiglottic space  
J5,J6 - left epiglottis, base of tongue, anterior soft tissue margin, and extension of pre-epiglottic space  
J7,J8 - right false cord, ventricle, true cord, and para-epiglottic space  
J9,J10 - left false cord, ventricle, true cord, and paraglottic space  
J11 - midline transglottic section including the anterior commissure  
J12 - right lateral soft tissue margin to the right of the epiglottis  
J13 - left lateral soft tissue margin just to the left of the epiglottis  
J14-J16 - right tongue mucosal margin, perpendicular  
J17 - left tongue mucosal margin, perpendicular  
J18 - right strap muscle margin, perpendicular  
J19 - left strap muscle margin, perpendicular  
J20 - right thyroid cricoid cartilage with mass, following decal  
J21 - left thyroid/cricoid cartilage, following decal  
J22 - right hyoid bone following decal  
J23 - left hyoid bone following decal  
J24 - three lymph node candidates

#### Light Microscopy:

Light microscopic examination is performed by Dr. Representative section of lymph node (G4) is negative for cytokeratin. CD31 immunohistochemistry shows no definite lymphovascular invasion (J6).