



Operative Procedure:  
Not provided

Pre-Operative Diagnosis:  
Not provided

Post-Operative Diagnosis:  
Not provided

Specimen Received:

- A: Right neck dissection; 2 stitch=inferior, 1 stitch=superior
- B: Left level 1 lymph node (FS)
- C: Left neck dissection
- D: Possible parathyroid tissue (FS)
- E: Total laryngectomy, right hemi-thyroidectomy
- F: Right tongue base margin (FS)
- G: Right tongue base #2 (FS)
- H: Right superior pharyngeal margin (FS)
- I: Right inferior pharyngeal margin (FS)
- J: Post cricoid margin (FS)
- K: Left inferior pharyngeal margin (FS)
- L: Left superior pharyngeal margin (FS)
- M: Left tongue base (FS)
- N: Tracheal margin (FS)
- O: Right tracheal esophageal groove

Final Pathologic Diagnosis:  
Larynx and right lobe of thyroid, total laryngectomy and hemi-thyroidectomy:

Keratinizing squamous cell carcinoma, moderately differentiated.

Histologic type: Keratinizing squamous cell carcinoma  
Histologic grade: Moderately differentiated  
Tumor size: 4.4 cm (greatest dimension)  
Depth of invasion: 2.0 cm (greatest dimension)  
Lymph-vascular invasion: Not identified  
Perineural invasion: Not identified  
Tumor site: Supraglottis; Epiglottis, Right pyriform sinus, Right false vocal cord, Right ventricle  
Tumor focality: Single focus  
Margins:

Margins uninvolved by invasive carcinoma  
Distance from closest margin: 0.1 cm  
Specify margin: Right superior pharyngeal (pyriform) margin (See note)

ICD-O-3  
Carcinoma, squamous  
cell keratinizing NOS  
8071/3  
Site Larynx C32.9  
JW 5/24/13

Criteria	Yes	No
Diagnosis Discrepancy		
Primary Tumor Site Discrepancy		
HiPAA Discrepancy		
Prior Malignancy History		
Dual/Synchronous Primary Tumor		
Case is (circle):	QUALIFIED	DISQUALIFIED
Reviewer Initials	MS	5/24/13

Margins uninvolved by carcinoma in situ {includes moderate and severe dysplasia}

Lymph nodes, extranodal extension: Not identified

Pathologic Staging (pTNM)

TNM descriptors: None known  
Primary tumor (pT): pT2  
Regional lymph nodes (pN): pN0  
Number examined: 76 (including parts A-C, O)  
Number involved: 0  
Distant metastasis (pM): pMX

Additional pathologic findings: Stoma site with ulceration and granulation tissue

Unremarkable thyroid gland

Specimen: Larynx; Right lobe of thyroid  
Received: Fresh  
Procedure: Total laryngectomy; Right hemi-thyroidectomy  
Laryngectomy: Opened  
Specimen size: 11 x 6 x 6 cm (greatest dimensions)  
Tumor laterality: Right

- A. Lymph node, right neck dissection:  
31 lymph nodes, negative for malignancy (0/31).
- B. Lymph node, left level 1, regional resection:  
Three lymph nodes, negative for malignancy (0/3).  
Frozen section diagnosis confirmed.
- C. Lymph node, left neck dissection:  
31 lymph nodes, negative for malignancy (0/31).
- D. Parathyroid, excision:  
Hypercellular parathyroid tissue.  
Frozen section diagnosis confirmed.
- E. Larynx and right lobe of thyroid, total laryngectomy and hemi-thyroidectomy:  
Keratinizing squamous cell carcinoma, moderately differentiated (see synoptic report for details).
- F. Tongue, right base margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.
- G. Tongue, right base margin #2, biopsy:

Negative for malignancy.  
Frozen section diagnosis confirmed.

H. Pharynx, right superior margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

I. Pharynx, right inferior margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

J. Posterior cricoid margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

K. Pharynx, left inferior margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

L. Pharynx, left superior margin, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

M. Tongue, left base, biopsy:  
Negative for malignancy.  
Frozen section diagnosis confirmed.

N. Trachea, margin, biopsy:  
Negative for malignancy.

O. Lymph node, right tracheal-esophageal groove, regional resection:  
11 lymph nodes, negative for malignancy (0/11).

The examination of this case material and the preparation of this report were performed by the staff pathologist.

**Note:**

The right superior pharyngeal margin sent for frozen section evaluation was negative for invasive carcinoma (part H). Invasive carcinoma does extend to this margin on the main resection specimen; however, this does not represent a true margin.

**Intraoperative Consult Diagnosis:**

FSB: Left level 1 lymph node:  
Negative for malignancy.

FSB TAT: 13 mins.

FSD: Possible parathyroid tissue:

Hypercellular parathyroid tissue identified.

FSD TAT: 8 mins.

FSF: Right tongue base margin #1:

Negative for malignancy.

FSG: Right tongue base margin #2:

Negative for malignancy.

FSH: Right superior pharyngeal margin:

Negative for malignancy.

FSI: Right inferior pharyngeal margin:

Negative for malignancy.

FSJ: Posterior cricoid margin:

Negative for malignancy.

FSK: Left inferior pharyngeal margin:

Negative for malignancy.

FSL: Left superior pharyngeal margin:

Negative for malignancy.

FSM: Left tongue base:

Negative for malignancy.

FSN: Tracheal margin:

Moderate squamous dysplasia.

FSF through FSN TAT: 35 mins. combined.

#### Gross Description:

Received are fifteen containers all labeled with the patient's name.

Parts A, C, E and O are received in formalin. All others are received fresh for frozen section evaluation.

Part A is received additionally labeled "right neck dissection, 1 stitch superior, 2 stitch inferior." The specimen consists of a portion of pink-tan to yellow, fibromembranous and fibrofatty soft tissue having dimensions of 9 x 3.5 cm by up to 1.5 cm. There are two sutures in place as previously indicated. Beginning in the "superior aspect," there are thirteen probable lymph nodes that range from 0.2 to 2.2 cm in greatest dimension. These lymph node candidates are submitted as follows:

- A1 five whole probable lymph nodes;
- A2 two whole probable lymph nodes;
- A3 two whole probable lymph node;
- A4-6 one whole lymph node each cassette, each bisected;
- A7-8 one whole lymph node bisected, one-half in each cassette.

There is no gross evidence of tumor involvement in these lymph nodes.

Within the aspect indicated as inferior, there are twenty-one probable lymph nodes that range from 0.2 to 1.8 cm in greatest dimension. These lymph node candidates are submitted as follows:

- A9-12 five whole lymph nodes each cassette;
- A13 one whole lymph node bisected.

Part B is received fresh for frozen section evaluation additionally labeled

"left level 1 lymph node (FSB+X)." The specimen consists of a 1.5 x 1 x 0.5 cm portion of yellow, lobulated, fibrofatty tissue. Within this tissue is a lymph node which is submitted for frozen section evaluation (FSB), with residual frozen section tissue submitted in cassette B1, and remaining tissues submitted entirely in cassette B2. The specimen has been submitted in its entirety.

Part C is received additionally labeled "left neck dissection" and consists of a portion of yellow, lobulated, fibrofatty tissue as well as pink-tan fibromembranous tissue, all of which have aggregate dimensions of 11 x 3.5 cm by up to 2 cm. There is no additional orientation offered with the specimen, and a lack of anatomic landmarks precludes orientation. Within these tissues, there are thirty-three lymph node candidates that range from 0.2 to 2 cm in greatest dimension. These lymph node candidates are submitted as follows:

- C1-5 five whole lymph nodes each cassette;
- C6 four whole probable lymph nodes;
- C7 two whole probable lymph nodes;
- C8-9 one whole lymph node each cassette, each bisected.

Part D is received additionally labeled "possible parathyroid tissue (FSD)" and consists of a single 5 mm in greatest dimension, tan-yellow soft tissue which is submitted for frozen section evaluation (FSD), with residual frozen section tissue submitted in cassette D.

Part E is received additionally labeled "total laryngectomy, right hemithyroidectomy."

Specimen/procedure: The specimen is the product of a total laryngectomy to include right lobe of thyroid.

Received: The specimen is received initially fresh and placed in formalin.

Aggregate specimen dimensions: The specimen has overall dimensions of 11 x 6 x 6 cm and includes hyoid bone, right lobe of thyroid with associated right paralaryngeal soft tissues, anterior soft tissues to include site of stoma, and left paralaryngeal soft tissues.

Tumor:

Site: The specimen has been previously incised on its posterior aspect and reveals a large fungating mass arising on the right lateral wall of the larynx having exophytic dimensions of 4.4 x 3 x 1.1 cm.

Traverses midline: No however it does about the midline.

Size and appearance of lesion: This mass is a tan-white exophytic mass.

Depth of invasion: This lesion invades laterally for a depth of 2 cm and anteriorly for a depth of 1 cm.

Extension into:

Cartilage/Preepiglottic space: It ablates the right aspect of the thyroid cartilage, abuts and pushes the preepiglottic space with possible involvement deferred to microscopic analysis (see cassettes E6-7).

Hyoid: It abuts the hyoid bone with possible involvement deferred to microscopic analysis.

Pyriform, thyroid, aryepiglottic: The right pyriform sinus is abutted by tumor without gross evidence of direct extension.

Focality: This is a singular focus mass.

Margins: The lesion approaches to within 3 mm of the epiglottic superior margin and to within 2 mm at its right of center (see cassette E2). This mass ablates the false vocal cord as well as ventricle and abuts the true vocal cord right side. The left true, false and ventricle components appear uninvolved. Additionally, this mass approaches to within 4 cm of the distal margin of surgical resection and 0.5 cm from the right lateral margin of surgical resection. It does not appear to involve the right lobe of the thyroid.

Lymph nodes: There are no lymph nodes grossly identified.

Other gross findings: No other masses are grossly identified.

#### Block List

Section are submitted as follows:

- E1 midline epiglottis;
- E2 epiglottis right of midline;
- E3 stoma;
- E4-5 hyoid bone and thyroid cartilage/calcified following decalcification;
- E6-7 sections of right lateral pharyngeal mass to include preepiglottic space;
- E8-9 right and left piriform sinuses, respectively;
- E10-11 right and left ventricle, true and false cords;
- E12 uninvolved thyroid gland.

See also gross photographs.

Part F is received additionally labeled "right tongue base margin (FSF)" and consists of multiple fragments of pink-tan, irregular soft tissue having aggregate dimensions of 1.4 x 0.8 x 0.2 cm, submitted for frozen section evaluation (FSF), with residual frozen section tissue submitted in cassette F.

Part G is received additionally labeled "right tongue base margin #2 (FSG)" and consists of a crescentic portion of pink-tan soft tissue which is 1.3 x 1.2 x 0.3 cm, submitted for frozen section evaluation (FSG), with residual frozen section tissue submitted in cassette G.

Part H is received additionally labeled "right superior pharyngeal margin (FSH)" and consists of a single 1 cm in greatest dimension, tan-yellow, irregular soft tissue which is submitted for frozen section evaluation (FSH), with residual frozen section tissue submitted in cassette H.

Part I is received additionally labeled "right inferior pharyngeal margin (FSI)" and consists of a crescentic portion of tan-yellow soft tissue, 1.5 cm in greatest dimension, submitted for frozen section evaluation (FSI), with residual frozen section tissue submitted in cassette I.

Part J is received additionally labeled "post cricoid margin (FSJ)" and consists of two portions of tan-yellow soft tissue having aggregate dimensions of 5 x 1.2

x 0.3 cm and submitted for frozen section evaluation (FSJ), with residual frozen section tissue submitted in cassette J.

Part K is received additionally labeled "left inferior pharyngeal margin (FSK)" and consists of two portions of tan-yellow, irregular soft tissue having aggregate dimensions of 0.8 x 0.8 x 0.2 cm, submitted for frozen section evaluation (FSK), with residual frozen section tissue submitted in cassette K.

Part L is received additionally labeled "left superior pharyngeal margin (FSL)" and consists of tan-yellow, irregular soft tissues which are 1.1 x 0.8 x 0.3 cm, submitted for frozen section evaluation (FSL), with residual frozen section tissue submitted in cassette L.

Part M is received additionally labeled "left tongue base (FSM)" and consists of a crescentic portion of pink-tan soft tissue, 1.5 x 1 x 0.3 cm, submitted for frozen section evaluation (FSM), with residual frozen section tissue submitted in cassette M.

Part N is received additionally labeled "tracheal margin (FSN)" and consists of two strips of tan-yellow soft tissue, 1 and 1.5 cm, not otherwise designated, submitted for frozen section evaluation (FSN), with residual frozen section tissue submitted in cassette N.

Part O is received additionally labeled "right tracheal esophageal groove" and consists of a portion of yellow, lobulated, fibrofatty tissue, 4.5 x 3.2 cm by up to 1 cm with no additional orientation offered or possible. Within these tissues, there are eleven probable lymph nodes that range from 0.3 to 0.9 cm in greatest dimension. These lymph node candidates are submitted as follows:

- O1 five whole probable lymph nodes;
- O2 four whole probable lymph nodes;
- O3 two whole probable lymph nodes.

**Microscopic Description:**

The laryngectomy specimen reveals an invasive keratinizing squamous cell carcinoma with numerous keratin pearls and with focal areas of more pronounced nuclear pleomorphism and a high mitotic rate. The margins of resection are negative for invasive carcinoma.

**END OF REPORT**

Taken:                      DOB:                      (Age:    ) Gender: M