

**PATIENT HISTORY:**

CHIEF COMPLAINT/ PRE-OP/ POST-OP DIAGNOSIS: Laryngeal cancer.

PROCEDURE: Total laryngectomy/neck dissection.

SPECIFIC CLINICAL QUESTION: Not given.

OUTSIDE TISSUE DIAGNOSIS: Yes.

PRIOR MALIGNANCY: No.

CHEMORADIATION THERAPY: No.

ORGAN TRANSPLANT: No.

IMMUNOSUPPRESSION: No.

OTHER DISEASES: No.

**FINAL DIAGNOSIS:**

PART 1: LEFT NECK, LEVELS 2-4, DISSECTION –  
TWENTY-EIGHT BENIGN LYMPH NODES (0/28).

PART 2: RIGHT NECK, LEVELS 2-4, DISSECTION –  
ELEVEN BENIGN LYMPH NODES (0/11).

PART 3: LEFT SUPERIOR LARYNGEAL NERVE, BIOPSY –  
NERVE, NO TUMOR SEEN.

PART 4: LARYNX, TOTAL LARYNGECTOMY –

- A. TRANSGLOTTIC INVASIVE SQUAMOUS CELL CARCINOMA, 4.0 CM, MODERATELY DIFFERENTIATED,  
INVADING THROUGH THE THYROID CARTILAGE INTO ANTERIOR SOFT TISSUE.
- B. VASCULAR INVASION IS PRESENT.
- C. PERINEURAL INVASION IS ABSENT.
- D. TRACHEAL AND ANTERIOR SOFT TISSUE MARGINS ARE FREE OF CARCINOMA (see Parts 5-9 for all other  
margins).
- E. TRACHEOSTOMY SITE.
- F. LEFT THYROID LOBE, NO SIGNIFICANT PATHOLOGIC CHANGE.
- G. PATHOLOGIC STAGE: pT4a N0 MX.

PART 5: RIGHT SUPERIOR MARGIN, BIOPSY –

- A. <0.1 CM FOCUS OF INVASIVE SQUAMOUS CELL CARCINOMA SEEN ON PERMANENT SECTION ONLY.
- B. THE ORIGINAL FROZEN SECTION SLIDES (TRUE MARGIN) WERE REVIEWED AND SHOW NO CARCINOMA.

PART 6: LEFT LARYNGEAL WALL MARGIN, BIOPSY –  
NO TUMOR SEEN.

PART 7: LEFT INFERIOR WALL MARGIN, BIOPSY –  
NO TUMOR SEEN.

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PART 8: LEFT SUPERIOR WALL MARGIN, BIOPSY –  
NO TUMOR SEEN.

PART 9: RIGHT SUPERIOR WALL MARGIN, BIOPSY –  
NO TUMOR SEEN.

My signature is attestation that I have personally reviewed the submitted material(s) and the final diagnosis reflects that evaluation.

### GROSS DESCRIPTION:

Part 1: The specimen is submitted fresh with the patient's name and "left neck levels 2-4". It consists of adipose tissue (12.0 x 6.0 x 1.8 cm), grossly unremarkable. Sections submitted as follows:

- 1A – two lymph nodes bisected (level 2)
- 1B-1D – one lymph node bisected per cassette (level 2)
- 1E – 6 lymph nodes (level 2)
- 1F – four lymph nodes (level 2)
- 1G – six lymph nodes (level 3)
- 1H – six lymph nodes (level 4)
- 1I – two lymph nodes (level 4).

Part 2: The specimen is submitted fresh with the patient's name and "right neck levels 2-4". It consists of adipose tissue (11.0 x 7.0 x 1.5 cm), grossly unremarkable. Sections submitted as follows:

- 2A – six lymph nodes (level 2)
- 2B – two lymph nodes (level 3)
- 2C – one lymph node bisected (level 3)
- 2D – one lymph node bisected (level 4)
- 2E – one lymph node (level 4).

Part 3: The specimen is submitted fresh with the patient's name and "left superior laryngeal nerve". It consists of a small tissue fragment (0.9 x 0.2 x 0.1 cm). The specimen is submitted in toto in one cassette.

Part 4: The specimen is submitted fresh with the patient's name and "total laryngectomy/neck dissection". It consists of a total laryngectomy specimen (9.0 x 7.5 x 4.0 cm) including hyoid bone (4.5 x 0.4 x 0.3), larynx from epiglottis to subglottis and seven tracheal rings. The anterior part of the specimen shows a tracheostomy site with a skin ellipse measuring 2.0 x 0.9 cm. On opening the larynx posteriorly, there is an irregular white friable ulcerated area of 1.2 x 0.9 cm, located in the left hemilarynx, near the midline, involving the left ventricle (transglottic). On serial section, the mass (4.0 x 2.0 x 1.8 cm) crosses the midline and involves the medial aspect of the right true vocal cord, which is edematous. The mass invades anteriorly the cricothyroid membrane and also adjacent muscle. The mass is 3.7 cm from the distal tracheal margin. The closest margin is the anterior soft tissue margin at approximately 0.3 cm. The anterior surface is covered by red/brown soft tissue, which is grossly unremarkable. A left thyroid lobe is 9.2 gram and measures 6.0 x 2.3 x 1.2 cm. It is covered by a thin capsule. On sectioning, the uniform dark brown parenchyma is grossly unremarkable. No parathyroid is identified. Digital pictures were taken.

### INK CODE :

- Black - anterior
- Orange - preepiglottic space

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- Green - new open space after removing the hyoid bone.

### CASSETTE SUMMARY :

- 4A - left tracheal margin
- 4B - right tracheal margin
- 4C - tumor infiltrating between cricoid and thyroid cartilage
- 4D - tumor infiltrating between cricoid and thyroid cartilage
- 4E - tumor in relation to epiglottis
- 4F - tumor in relation to distal tracheal ring
- 4G - right closest anterior margin
- 4H - thyroid.
- 4I - tracheostomy site.

Part 5: The specimen is submitted fresh with the patient's name and "right margin superior true margin inked". It consists of a small tissue fragment (1.5 x 1.0 x 0.2 cm). The specimen is submitted in total in one cassette.

Part 6: The specimen is submitted fresh with the patient's name and "left margin laryngeal margin, ink on true margin". It consists of a small tissue fragment (1.5 x 0.5 x 0.2 cm). The specimen is submitted in total in one cassette.

Part 7: The specimen is submitted fresh with the patient's name and "inferior wall margin, clip on left, true margin inked". It consists of a small tissue fragment (0.7 x 0.3 x 0.2 cm). The specimen is submitted in total in one cassette.

Part 8: The specimen is submitted fresh with the patient's name and "left superior wall margin, clip on left true margin ink". It consists of a small tissue fragment (0.7 x 0.3 x 0.2 cm). The specimen is submitted in total in one cassette.

Part 9: The specimen is submitted fresh with the patient's name and "right superior wall margin, clip on left true margin ink". It consists of a small tissue fragment (1.2 x 0.4 x 0.2 cm). The specimen is submitted in total in one cassette.

### INTRAOPERATIVE CONSULTATION:

3AFS: LEFT SUPERIOR LARYNGEAL NERVE (frozen section) -

- A. BENIGN.
- B. NERVE.
- C. NO TUMOR SEEN ( [REDACTED] ).

5AFS: RIGHT MARGIN, SUPERIOR (frozen section) -

- A. BENIGN.
- B. NO TUMOR SEEN ( [REDACTED] ).

6AFS: LEFT MARGIN LARYNGEAL WALL MARGIN (frozen section) -

- A. BENIGN.
- B. NO TUMOR SEEN ( [REDACTED] ).

7AFS: INFERIOR WALL MARGIN (frozen section) -

- A. BENIGN.
- B. NO TUMOR SEEN ( [REDACTED] ).

8AFS: LEFT SUPERIOR WALL MARGIN (frozen section) -

- A. BENIGN.
- B. NO TUMOR SEEN ( [REDACTED] ).

9AFS: RIGHT SUPERIOR WALL MARGIN (frozen section) -

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- A. BENIGN.
- B. NO TUMOR SEEN ( [REDACTED] ).

## MICROSCOPIC:

Microscopic examination substantiates the above diagnosis.  
[REDACTED]

The following statement applies to all immunohistochemistry, insitu hybridization (ISH & FISH), molecular anatomic pathology, and immunofluorescence testing:

The testing was developed and its performance characteristics determined by the [REDACTED] Department of Pathology, as required by the [REDACTED] regulations. The testing has not been cleared or approved for the specific use by the U.S. Food and Drug Administration, but the FDA has determined such approval is not necessary for clinical use. Tissue fixation ranges from a minimum of 2 to a maximum of 84 hours.

This laboratory is certified under the Clinical Laboratory Improvement Amendments of [REDACTED] ("CLIA") as qualified to perform high-complexity clinical testing. Pursuant to the requirements of CLIA, ASR's used in this laboratory have been established and verified for accuracy and precision. Additional information about this type of test is available upon request.

## CASE SYNOPSIS:

### SYNOPTIC DATA - PRIMARY UPPER AERODIGESTIVE TRACT AND SALIVARY GLAND TUMORS

SPECIMEN TYPE: Resection: total laryngectomy

TUMOR SITE: Other: larynx, tranglottic

TUMOR SIZE: Greatest dimension: 4 cm

HISTOLOGIC TYPE: Squamous cell carcinoma, conventional

HISTOLOGIC GRADE: G2

PATHOLOGIC STAGING (pTNM): pT4a  
Number of regional lymph nodes examined: 39  
Number of regional lymph nodes involved: 0

pMX

MARGINS: Margins uninvolved by tumor

VENOUS/LYMPHATIC (LARGE/SMALL VESSEL) INVASION (V/L):

Present

Absent

PERINEURAL INVASION: None identified

ADDITIONAL PATHOLOGIC FINDINGS:

## HISTO TISSUE SUMMARY/SLIDES REVIEWED:

Part 1: Left Neck Levels 2-4  
[REDACTED]

Stain/cnt	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E
H&E x 1	F
H&E x 1	G
H&E x 1	H
H&E x 1	I

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### Part 2: Right Neck Levels 2-4

Stain/cnt	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E

### Part 3: Left Superior Laryngeal Nerve

Stain/cnt	Block
H&E x 1	AFS

### Part 4: Laryngeal Mass

Stain/cnt	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E
H&E x 1	F
H&E x 1	G
H&E x 1	H
H&E x 1	I

### Part 5: Right Margin Superior True Margin Inked

Stain/cnt	Block
RH&E Lev ___ x 5	AFS
H&E x 1	AFS

### Part 6: Left Margin Laryngeal Wall Margin-Ink On True Margin, Clip Superior

Stain/cnt	Block
H&E x 1	AFS

### Part 7: Inferior Wall Margin, Clip On Left, True Margin Inked

H&E x 1	AFS
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### Part 8: Left Superior Wall Margin, Clip On Left, True Margin Inked

Stain/cnt	Block
H&E x 1	AFS

### Part 9: Right Superior Wall Margin, Clip On Left, True Margin Inked

Stain/cnt	Block
H&E x 1	AFS



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ICD-9 Diagnosis Codes: {None Entered}

