



CASE: RECEIVED:

## CLINICAL DATA:

Composite resection, left arm free flap, oral cancer.

## GROSS DESCRIPTION:

A) Received fresh designated "right level II" is a 2.1 x 1.1 x 0.4 cm piece of fibrofatty tissue, which is bisected parallel to the long axis. Specimen has a pale tan cut surface. Entirely submitted in A1.

B) Received in a container of formalin labeled "..., right neck dissection" is a 10 x 4.8 x 2 cm yellow lobulated portion of fibrofatty tissue. There is a double suture attached to the level II region and a single suture attached to the level IV region. The specimen is sectioned and in the level II region there is a 4.5 x 2.0 x 1.5 cm tan lobulated salivary gland. It is serially sectioned and has tan lobulated cut surfaces. No masses or lesions are identified. The specimen is divided into levels II, III, IV, and V. In the level II region there is a 2 x 2 x 1 cm previously incised tan-gray friable apparent grossly involved lymph node. The remaining regions are sectioned and have fibrofatty cut surfaces and numerous candidate lymph nodes are identified ranging from 0.1-2.5 cm in greatest dimension. No additional metastatic disease is grossly appreciated. Representative sections are submitted as follows: B1 - salivary gland; B2 - sections of grossly involved level II lymph node; B3 - two level II bisected lymph nodes, one inked blue; B4 - three level III candidate lymph nodes; B5 - seven level IV candidate lymph nodes; B6 - one bisected level IV lymph node; B7 - four level V candidate lymph nodes; B8 - four level V candidate lymph nodes; B9 - one bisected level V lymph node; B10 - one bisected level V lymph node.

C) Received fresh designated "right level V" is one piece of yellow fibrofatty tissue measuring 4 x 2 x 0.5 cm. The specimen is examined for potential lymph nodes and seven potential lymph node candidates are identified. The largest candidate is inked black and bisected, and all lymph node candidates are submitted in cassette C1.

D) Received fresh designated "inferior margin" is a 0.6 x 0.4 x 0.2 cm piece of whitish red fibrous tissue, which is inked black and entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

E) Received fresh designated "right composite resection, single stitch anterior lateral, double stitch posterior medial" is a 5.8 x 5.2 x 5.4 cm composite resection including a portion of the bony maxilla with three teeth, the soft tissue lateral to the mandible, and associated soft tissue superior to the mandible including a portion of a lower molar (mandibular bone is not present). The buccal surface of the oral cavity, lateral to the teeth, has an exophytic, friable lesion which extends along the posterior mucosal surface to the medial aspect of the specimen where it is present medial to the upper and lower teeth. Grossly, this exophytic lesion is at least 2.5 x 3.5 x 2.5 cm on initial examination. The edges of the lesion are grossly 0.5 cm from the posterior mucosal margin, 0.8 cm from the inferior mucosal margin, 0.5 cm from the anterior mucosal margin, and 0.5 cm from the superior mucosal margin. On initial gross examination, this lesion does not appear to extend through the fibrofatty tissue located lateral to the buccal surface.

ICD-O-3  
Carcinoma, squamous cell,  
keratinizing NOS 8071/3  
Site: Oral cavity C06.9  
JW 8/9/13

Using the orientation provided per surgeon (single stitch anterior lateral, double stitch posterior medial), the mucosal margins are inked in the following manner: anterior = blue; superior = black; medial = red; inferior = green. The lateral soft tissue margin is inked orange, the inferior soft tissue is inked green, the superior soft tissue is inked black, the medial soft tissue is inked red, and the posterior soft tissue margin is inked blue over green. Representative shave margins are taken from the inferior and anterior mucosal surfaces. The specimen is then cut in a transverse plane, separating the maxilla from the mandibular soft tissue, and each piece is serially sectioned. The tumor has a firm white cut surface, with friable areas, and grossly extends to within 0.1 mm of the deep inked margin (blue over green), within 0.1 cm of the inked medial soft tissue margin (red), within 0.1 cm of the inked lateral soft tissue margin (orange), and within 0.2 cm of the inferior soft tissue margin (green). On sectioning, the tumor appears larger than on original examination, and measures 4.5 x 4.0 x 2.5 cm. The upper maxillary bone is focally sectioned and has foci suspicious for bony involvement; these areas are submitted for decalcification.

Cassette summary: E1 - representative shave margins from the inferior and anterior mucosal margins; E2 - representative perpendicular margins from the medial and superior mucosal margins; E3 - representative sections of neoplasm in relationship to deep soft tissue margin; E4 - relationship of neoplasm and closest medial soft tissue margin; E5 - relationship of neoplasm and closest lateral soft tissue margin; E6 - relationship of neoplasm and superior soft tissue margin; E7 - representative sections of superior upper lateral mucosa in relationship to inked mucosal margin; E8 - relationship of neoplasm and inferior inked margin; E9-E10 - composite cross section through neoplasm; E11- E12 - upper maxillary bone..

F) Received fresh designated "buccal tumor" is one piece of whitish red fibrous tissue, 0.4 x 0.3 x 0.3 cm. The specimen is entirely submitted in for frozen section analysis, after which it is thawed and submitted in cassette .

G) Received fresh designated "lateral margin" is a 0.5 x 0.5 x 0.3 cm triangular piece of whitish red tissue which is inked blue and entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

H) Received fresh designated "medial margin" is a 0.5 x 0.4 x 0.2 cm piece of whitish red tissue which is not inked, and is entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

I) Received fresh designated "deep margin" is a 0.6 x 0.2 x 0.2 cm piece of red, fibrous tissue which is inked green and entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

J) Received fresh designated "anterior margin" is one piece of whitish red fibrous tissue measuring 0.5 x 0.3 x 0.2 cm. The specimen is inked red and entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

K) Received fresh designated "superior margin" is a 0.6 x 0.3 x 0.2 cm piece of red-white fibrous tissue which is inked orange and entirely

submitted for frozen section analysis, after which it is thawed and submitted in cassette

L) Received fresh designated "lateral bony margin" is a 4.0 x 0.4 x 0.7 cm sickle-shaped piece of bone and adherent dark brown soft tissue. No grossly obvious lesions are identified invading the bony surface; however, multiple cross sections are made and the specimen is submitted entirely in cassettes L1 and L2.

M) Received fresh designated "posterior bony margin" is a 1.5 x 1.1 x 0.1 cm translucent piece of bone. The specimen is submitted entirely in cassette M1 after a brief period of decalcification.

N) Received fresh designated "new buccal margin" is one piece of yellow soft fibrofatty tissue measuring 0.5 x 0.3 x 0.3 cm, which is entirely submitted for frozen section analysis, after which it is thawed and submitted in cassette

O) Received in formalin designated "parotid duct" is a 0.4 x 0.2 x 0.2 cm piece of white, firm soft tissue. A duct lumen is not identified. The specimen is bisected perpendicular to the long axis, and both resulting tissue fragments are submitted in cassette O1.

INTRAOPERATIVE CONSULTATION:

FFS: Invasive squamous cell carcinoma,  
DFS, GFS, HFS, IFS, JFS, KFS, NFS: No carcinoma identified,

FINAL DIAGNOSIS:

A) Lymph nodes, right level II, excision: 1 lymph node with no evidence of carcinoma.

B) Lymph nodes, right neck, dissection: 2 of 24 lymph nodes with metastatic squamous cell carcinoma (including 1/3 nodes from level II; 0/3 nodes from level III; 0/7 nodes from level IV; 1/11 nodes from level V).

C) Lymph nodes, right level V, excision: 5 lymph nodes with no evidence of carcinoma.

E) Maxillary bone and attached soft tissue, composite resection: Invasive keratinizing squamous cell carcinoma (well-to-moderately-differentiated) with the following features:

1. 4.5 cm in greatest dimension.

2. Margins: Carcinoma is present at the deep soft tissue margin, 0.2 cm from the medial margin, 0.3 cm from the lateral soft tissue margin, 0.2 cm from the superior soft tissue margin, and 0.1 cm from the inferior soft tissue margin. See separately submitted mucosal margins below.

3. Angiolymphatic invasion is not identified.

4. No bone invasion identified.

5. See comment.

F) Buccal tumor, biopsy: Invasive squamous cell carcinoma.

D, G, H, I, J, K, N) Inferior, lateral, medial, deep, anterior, superior,

and new buccal margins, excisions: No dysplasia or carcinoma identified

L, M) Bone, lateral and posterior bony margins, respectively, resections:  
No evidence of carcinoma.

O) Parotid duct, excision: No dysplasia or carcinoma identified.

COMMENT:

E) The minimum pathologic stage based on the above information is pT3 N2 MX  
(AJCC 6th edition, 2002).

Procedures used to establish the diagnosis:

Routine

Criteria	7/29/13	Yes	No
Diagnosis Discrepancy			
Primary Tumor Site Discrepancy			
HIPAA Discrepancy			
Prior Malignancy History			
Dual/Synchronous Primary Noted			
Case is (circle):	QUALIFIED	DISQUALIFIED	
Reviewer Initials	7/29/13		
Date Reviewed:			