



Redacted

IAD-0-3  
 Carcinoma, squamous cell NOS  
 path 807613  
 Site Maxilla C41.0  
 C60F Upper alveolar ridge  
 C03.0  
 JW 4/12/13

COLLECTED:

RECEIVED:

CLINICAL DATA: Per Mindscape: Oral cancer.

GROSS DESCRIPTION: A) Received fresh for frozen section consultation labeled " " and designated "deep margin" is a 1.2 x 0.7 x 0.3 cm tan-pink soft tissue fragment. The specimen is entirely submitted for frozen section consultation and now is resubmitted as A1D1FS. B) Received fresh for frozen section consultation labeled " " and designated "lateral margin" is a 0.7 x 0.5 x 0.2 cm tan-pink mucosa soft tissue fragment. The specimen is inked blue and entirely submitted for frozen section consultation, and is resubmitted as B1C1FS. C) Received fresh for frozen section consultation labeled " " and designated "anterior margin" is a 0.9 x 0.5 x 0.2 cm mucosa soft tissue fragment. The specimen is entirely submitted for frozen section consultation and is resubmitted as B1C1FS. D) Received fresh for frozen section consultation labeled " " and designated "posterior margin" is a 0.4 x 0.8 x 0.5 cm tan-pink mucosa soft tissue fragment. The specimen is inked blue and entirely submitted for frozen section consultation, and is resubmitted as A1D1FS. E) Received fresh for frozen section consultation labeled " " and designated "medial margin" is a 0.7 x 0.5 x 0.1 cm tan-pink mucosa soft tissue fragment. The specimen is entirely submitted for frozen section consultation and is resubmitted as E1FS (?). F) Received fresh, labeled "maxilla, right", is a right composite resection specimen comprising posterior maxilla and palatal resection. The specimen is 6.7 cm from anterior to posterior, 4.3 cm from medial to lateral, and 3.5 cm from superior to inferior. The anterior mucosal surface has two teeth with silver metal fillings; one is 0.8 cm in greatest dimension, and the other is 1.3 cm in greatest dimension. A 2.7 x 1.4 cm depressed, indurated lesion is immediately posterior to the teeth. The lesion has a central 2.2 x 0.6 cm defect consistent with excision of tumor for research. The edge of the lesion is tan-white, dusky, and edematous, and it has a rolled edge. The lesion extends 0.3 cm from the nearest lateral mucosal margin, 0.5 cm from the nearest posterior mucosal margin, and 1.1 cm from the nearest medial mucosal margin. The anterior mucosal margin is 1.8 cm from the lesion. The remainder of the mucosal surface is tan-pink, smooth and glistening. The underlying soft tissue margins consist of tan-yellow, lobulated adipose tissue and maroon-brown possible muscle. No definite tumor is identified at the soft tissue surface. The medial- superior aspect of the specimen has a 3.3 x 1.0 cm mucosal surface consistent with sinus cavity; the sinus mucosa is tan-pink, smooth and glistening with areas that are red-brown, roughened, and focally hemorrhagic. The specimen is inked as follows: anterior = red, medial anterior = black, medial posterior = green, superior = yellow, lateral = orange and posterior = blue. The specimen is serially sectioned from anterior to posterior to reveal a 5.2 x 4.1 x 3.5 cm, tan-white, poly-lobulated, firm mass which immediately underlies the previously described mucosal lesion. The mass appears to abut the posterior, superior, lateral, and medial soft tissue margins. The mass abuts the posterior aspect of the most posterior tooth, and it does not appear to extend any farther anteriorly. Representative sections are submitted as follows: F1 - medial sinus soft tissue margin; F2, F3 - posterior soft tissue margins, perpendicular; F4-F6 - composite cross section of mid posterior plane of the specimen; F7 - anterior bone margin, en face (decal); F8-F10 - composite cross section of mid anterior plane of the specimen (decal). G) Received fresh for frozen section consultation labeled " new deep margin" is a 0.8 x 0.6 x 0.5 cm red-brown soft tissue fragment. The specimen was entirely submitted for frozen section consultation and is resubmitted as G1FS. H) Designated "Right maxilla tumor and all first 5 margins and normal tongue tissue to research": No tissue received. Tissue submitted for research in OR per

designation on pathology requisition form received in pathology, not examined in Pathology. I) Received unfixed labeled " new deep margin #2" is 0.7 x 0.4 x 0.3 cm tan-white to maroon-brown soft tissue fragment entirely submitted as I1. J) Received unfixed labeled " level I, II, III nodes" is an 11.2 x 5 x 2.5 cm tan-pink fibrofatty soft tissue segment. Specimen is oriented as follows: one suture level I, two sutures level II, and three sutures level III. Multiple lymph node candidates are identified in each level. Level I contains a grossly positive 2.6 x 1.7 x 2.3 cm tan-white lymph node as well as a 3.7 x 2.6 x 1.4 cm fragment of tan-white, lobulated tissue consistent with possible salivary gland. Level II contains two grossly positive lymph nodes, the larger is 3.7 x 2.3 x 2.2 cm and the smaller is 2.2 x 1.4 x 0.9 cm. No grossly positive lymph nodes are identified within level III. Representative sections are submitted as follows: J1 - representative section of grossly positive level I lymph node; J2 - one candidate lymph node bisected; J3 - four intact candidate lymph nodes (J1-J3 are level I); J4 - representative section of level I possible salivary gland tissue; J5, J6 - cross-section of larger grossly involved level II lymph node; J7 - representative cross-section of smaller grossly involved level II lymph node; J8 - one level II candidate lymph node bisected; J9 - four intact level II candidate lymph nodes; J10 - three level III intact candidate lymph nodes. K) Received in formalin labeled " level V lymph nodes" is a 3.2 x 1.9 x 1.8 cm tan-pink fibrofatty soft tissue segment. Multiple candidate lymph nodes ranging from 0.3 to 1.2 cm are identified. Representative sections are submitted as follows: K1 - six intact candidate lymph nodes; K2 - six intact candidate lymph nodes; K3 - two candidate lymph nodes, one intact uninked and one bisected and inked black; K4 - three intact candidate lymph nodes. L) Received in formalin labeled " level IV lymph nodes" is a 2.2 x 2 x 0.6 cm tan-yellow, fibrofatty soft tissue segment. Multiple tan-pink, otherwise unremarkable lymph node candidates are identified. No gross metastases are identified. Representative sections are submitted as follows: L1 - two intact candidate lymph nodes; L2 - four intact candidate lymph nodes.

INTRAOPERATIVE CONSULTATION: AFS) Deep margin, biopsy: Invasive carcinoma  
Margins- Lateral, anterior, posterior, respectively, biopsies: No in  
situ or invasive carcinoma                      Medial margin, biopsy: No evidence of malignancy  
New deep margin: Positive for invasive carcinoma

#### FINAL DIAGNOSIS:

A-G) Deep, lateral, anterior, posterior, and media margins, respectively, biopsies; Oral cavity, right maxilla, excision; new deep margin, biopsy: Invasive squamous carcinoma, moderately differentiated, with the following features:

1. Carcinoma size: 6.7 cm in greatest dimension.
2. Margins of resection:
  - a. Lateral, posterior and superior margins of specimen F are involved by invasive carcinoma.
  - b. Separately submitted lateral, anterior, posterior and medial margins (B-E) are negative for in situ or invasive carcinoma.
  - c. Deep margin and new deep margin, specimens A and G, are both positive for involvement by carcinoma.

3. High grade squamous intraepithelial neoplasia (so-called carcinoma in situ) component is also present, best seen in block F5, above invasive carcinoma. No high grade intraepithelial neoplasia is present in the epithelium at the margins.

4. Carcinoma undermines and erodes into respiratory mucosa of maxillary sinus.

5. Extensive lymphovascular invasion is present, including invasion of large veins (see block F3).

6. Perineural invasion: Not identified.

7. Carcinoma invades into edge of a minor salivary gland (block F6).

8. The carcinoma has numerous apoptotic cells with vacuolar degeneration. Neoplastic cells are negative for mucin by mucicarmine stain (blocks F2, F8); with an appropriately positive control.

9. Organizing thrombi in many small veins.

10. Carcinoma invades bone of maxilla, and it is present in the bone at the anterior margin (F7).

11. Minimal pathologic stage, incorporating parts J-L: pT3 N2b MX (AJCC 6th edition, 2002)

H) No tissue examined in Pathology; see Gross Description, above, submitted in OR for research.

J) Lymph node, level I, II, and III, excision: Metastatic squamous carcinoma involving 3 of 17 lymph nodes, including 1 of 6 level I lymph nodes, 2 of 8 level II lymph nodes, and 0 of 3 level III lymph nodes, with the following additional features:

1. Size of largest focus of metastatic carcinoma: 3.7 cm in greatest dimension (gross measurement of positive level II node).

2. Extracapsular soft tissue invasion: Present.

3. Salivary gland, negative for involvement by carcinoma.

K) Lymph node, level V, excision: Metastatic squamous carcinoma involving 1 of 20 lymph nodes.

1. Size of largest focus of metastatic carcinoma: 0.4 cm in greatest dimension.

2. Extracapsular angiolymphatic invasion is present. No definite extracapsular soft tissue invasion is seen.

L) Lymph node, level V, excision: 4 lymph nodes with no metastatic carcinoma identified.

Procedures used to establish the diagnosis: F Mucicarmine stain

Criteria	Yes	No
Diagnosis Discrepancy		/
Primary Tumor Site Discrepancy		/
HIFAA Discrepancy		/
Prior Malignancy History		/
Dual/Synchronous Primary Noted		/
Case Is (in,le):	QUALIFIED	DISQUALIFIED
Reviewer Initials	hw	1/28/13