



ICD-6-3

Carcinoma, squamous cell  
No 8 8670/3

Site Upper alveolar ridge  
mucosa CB3.1

QW 8/9/13

CASE: RECEIVED:

CLINICAL DATA:

Maxillary cancer. Per patient is a history of squamous cell carcinoma of the maxilla.

GROSS DESCRIPTION:

A) Received fresh in a container labeled "... for intraoperative consultation" designated "right buccal margin" is a 2 x 0.4 x 0.2 cm portion of pink-tan soft tissue. The specimen is inked blue. The specimen is bisected and then submitted entirely for frozen section, and following frozen section evaluation, the residue is submitted entirely in cassette AFS1.

B) Received fresh in a container labeled "...", designated "right maxillary tumor" is a 5.6 cm ML x 4.2 cm AP x 3.6 cm SI portion of maxillary bone, hard and soft palate, floor of ethmoid sinus, and single tooth. The anterior soft tissue and bony margin is inked blue, the lateral bone and soft tissue margin is inked black, the posterior soft tissue and bone margin is inked orange, and the medial soft tissue margin is inked green. The mucosa of the palate is tan-pink and focally hemorrhagic with a focal area (2.1 x 2.0 cm) that is granular and has an irregular appearance with dark brown discoloration. Margins are taken for the anterior, lateral, medial, and posterior soft tissue margins, and then the specimen is serially sectioned from medial to lateral to reveal a 2.0 x 2.1 x 2.6 cm, white, firm, ill-defined mass that is eroded through the maxillary bone. After serial sections through the mass are taken, the remaining specimen consists of two thin bones, and a tooth. Cassette list: B1 - anterior soft tissue margin; B2 - lateral soft tissue margin; B3 - posterior soft tissue margin; B4 - medial soft tissue margin; B5 - posterior portion of the mass; B6 - representative section through the mass; B7 - additional representative section through the mass; B8 - additional section through the mass. The bony anterior, posterior, and lateral margins are submitted for decalcification prior to further processing, and then submitted in cassettes B8-B10.

C) Received fresh in a container for frozen labeled "..., deep margin" are fragments of dark red soft tissue admixed with fragments of bone measuring 4.5 x 1.5 x 1 cm in aggregate dimension. Representative sections of soft tissue are submitted for frozen. Frozen section residue is submitted in block CFS1.

D) Received fresh in a container for frozen labeled "..., posterior margin" are 2 dark red fragments of soft tissue measuring 1.5 x 1 x 0.2 cm in aggregate dimension. The specimen is entirely submitted for frozen. Frozen section residue is submitted in block DFS1.

E) Received fresh in a container for frozen labeled "..., lingual nerve" is a 0.5 cm tan, irregular soft tissue which is marked with blue ink and entirely submitted for frozen. Frozen section residue is submitted in block

F) Received fresh in a container for frozen labeled "..., superior margin" is a 1.2 x 0.8 x 0.2 cm tan, irregular soft tissue which is marked with blue ink and entirely submitted for frozen. Frozen section residue is submitted in block

G) Received fresh in a container for frozen labeled "..., lateral margin" is a 0.8 x 0.5 x 0.1 cm tan, irregular soft tissue which is marked with black ink and entirely submitted for frozen. Frozen section residue is submitted in block

H) Received fresh in a container for frozen labeled "..., anterior margin" is a 0.6 x 0.2 x 0.1 cm tan, irregular soft tissue which is marked with orange ink and entirely submitted for frozen. Frozen section residue is submitted in block

I) Received fresh in a container for frozen labeled "..., deep margin" is a 0.5 x 0.5 x 0.1 cm tan, irregular soft tissue which is marked with blue ink and entirely submitted for frozen. Frozen section residue is submitted in block

J) Received fresh in a container for frozen labeled "..., medial margin" is a 1.2 cm tan, irregular soft tissue which is marked with black ink and entirely submitted for frozen. Frozen section residue is submitted in block

K) Received fresh in a container for frozen labeled "..., posterior deep margin" is a 0.7 x 0.7 x 0.2 cm tan, irregular soft tissue which is marked with black ink and entirely submitted for frozen. Frozen section residue is submitted in block

L) Received fresh in a container for frozen labeled "..., deep medial margin" is a 1 x 0.6 x 0.1 cm tan, irregular soft tissue which is marked with orange ink and entirely submitted for frozen. Frozen section residue is submitted in block

M) Received in a container of formalin labeled "..., right maxillary mucosa" are multiple hemorrhagic, rubbery fragments of soft tissue admixed with a portion of cartilage. Specimen measures 2 x 2 x 0.5 cm in aggregate dimension. Soft tissue minus the cartilage is entirely submitted in cassette M1.

N) Received in a container of formalin labeled "..., tooth #5" is a 2.2 x 0.6 x 0.2 cm premolar designated as "#5." There is silver amalgam on the lateral side of the crown. No soft tissue is received. Specimen is reviewed by Dr. Gross only.

O) Received fresh in a container for frozen labeled "..., new medial mucosa margin" is a 0.8 x 0.5 x 0.1 cm tan, irregular soft tissue which is marked with black ink and entirely submitted for frozen. Frozen section residue is submitted in block

P) Received fresh in a container for frozen labeled "..., new superior margin" is a 1 x 0.3 x 0.3 cm tan, irregular soft tissue which is marked with blue ink and entirely submitted for frozen. Frozen section residue is submitted in block

Q) Received fresh in a container for frozen labeled "..., new deep margin" is a 0.6 cm tan, irregular soft tissue which is marked with black ink and entirely submitted for frozen. Frozen section residue is submitted in block

R) Received fresh in a container for frozen labeled "..., palate" is a 0.6 cm tan, irregular soft tissue which is marked with blue ink and entirely

submitted for frozen. Frozen section residue is submitted in block

S) Received in a container of formalin labeled "..., repeat medial resection" are a few variegated, hemorrhagic, rubbery portions of soft tissue measuring 2.6 x 2 x 0.5 cm in aggregate dimension. There are congested, friable cut surfaces. No obvious masses are identified. Specimen is entirely submitted in 2 cassettes.

T) Received in a container of formalin labeled "..., medial maxillary wall" is a 2 x 1.5 x 0.2 cm tan, firm, irregular fragment of cartilage with a scant amount of attached apparent bone. Specimen is sectioned and has dark red cut surfaces and no masses are appreciated. The specimen is entirely submitted in cassette T1 following decalcification.

#### INTRAOPERATIVE CONSULTATION:

AFS) No carcinoma identified (cautery artifact present)  
CFS) Deep margin positive for carcinoma  
DFS) Posterior margin positive for carcinoma  
EFS) Lingual nerve positive for carcinoma  
FFS) Superior margin positive for carcinoma; bone involved  
GFS) Lateral margin negative  
HFS) Anterior margin negative  
IFS) Deep lateral margin negative  
JFS) Medial margin positive for carcinoma  
KFS) Posterior deep margin positive for carcinoma  
LFS) Deep medial margin negative  
OFS) New medial mucosal margin negative  
PFS) New superior margin negative  
QFS) New deep margin negative  
RFS) Palate negative

#### FINAL DIAGNOSIS:

A) Right buccal margin, excision: Squamous mucosa with no evidence of in situ or invasive carcinoma.

B) Right maxillary tumor, maxillectomy: Poorly differentiated invasive squamous cell carcinoma with the following features:

1. 2.6 cm.
2. Extent: Carcinoma erodes through the maxillary bone.
3. Margins:
  - a. Carcinoma involves the orange-inked posterior specimen margin, the green-inked medial specimen margin and the black-inked lateral specimen soft tissue margins; see comment.
  - b. The anterior soft tissue margin is negative for carcinoma.
  - c. Carcinoma involves the medial maxillary bone margin (hard palate); anterior maxillary bone margin and bones of the maxillary sinus are negative for carcinoma.
4. Extensive lymphovascular invasion is identified.
5. Focal perineural invasion is present.
6. The minimum pathologic stage is pT4a, pNx, pMx (AJCC, 2002, 6th edition).

C, D, E, F, J, K) Mucosa, sites as designated, biopsies: Multiple designated margins positive for poorly differentiated squamous cell carcinoma, including:

1. Deep margin.

2. Posterior margin.
3. Lingual nerve.
4. Superior margin.
5. Medial margin.
6. Posterior deep margin.

G,H,I,L,M,O,P,Q-T) Mucosa, sites as designated, biopsies: Multiple designated mucosal margins with no evidence of in situ or invasive carcinoma, including:

1. Lateral margin.
2. Anterior margin.
3. Deep lateral margin.
4. Deep medial margin.
5. Right maxillary mucosa.
6. New medial mucosal margin
7. New superior margin.
8. New deep margin.
9. Palate.
10. Repeat medial resection.
11. Medial maxillary wall.

N) Tooth #5, extraction (gross only): Tooth with silver amalgam and no gross diagnostic alterations.

COMMENT:

Evaluation of the maxillectomy specimen (B) was supplemented by intraoperative evaluation of multiple surgical margins by frozen section. Although several specimen margins are positive (see above), final surgical margins should be based on a correlation of all examined specimens in the surgical context.

Procedures used to establish the diagnosis:  
Routine

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