

Surgical Pathology Report

Diagnosis:

FSA: Anterior margin, left cheek skin, biopsy
- No carcinoma identified.

FSB: Superior margin, left cheek skin, biopsy
- No carcinoma identified.

FSC: Posterior margin, left cheek skin, biopsy
- No carcinoma identified.

FSD: Inferior margin, left cheek skin, biopsy
- No carcinoma identified.

FSE: Anterior left mandible periosteum, biopsy
- No carcinoma identified.

FSF: Left anterior mandible margin, biopsy
- No carcinoma identified.

FSG: Left anterior mucosal margin, biopsy
- No carcinoma identified.
- No mucosal epithelium for evaluation.

FSH: Left inferior mucosal margin, biopsy
- No carcinoma identified.

FSI: Left posterior mucosal margin, biopsy
- No carcinoma identified.

FSJ: Left superior mucosal margin, biopsy
- No carcinoma identified.

K: Thyroid, isthmus, removal
- Benign thyroid parenchyma, no carcinoma identified.

L: Left mandible, maxilla, and cheek, en bloc resection

Tumor histologic type: invasive squamous cell carcinoma

Histologic grade: well-differentiated

Tumor extent: Buccal mucosa, submucosa, abuts maxillary bone (L20), invades mandible (L21).

Presence/absence of CIS: present

Angiolymphatic space invasion: not identified

Perineural space invasion: not identified

Soft tissue surgical margins:

- Close but negative
- Closest is <1 mm to mid/inferior soft tissue margin (L16).
- Distance to anterior 4 mm (L1).
- Distance to posterior 6 mm (L2).
- Distance to lateral 9 mm (L13).
- Distance to inferior 6 mm (L14).
- Distance to superior 7 mm (L15).
- Bone invasion identified in mandible section (L21).

Bone surgical margins: Not involved.

Lymph nodes: 0/2 in this specimen

Other significant findings: none

AJCC Stage: pT4a (skin of face invasion) pN0 pMx

This staging information is based on information available at the time of this report, and is subject to change pending clinical review and additional information.

M: Lymph nodes, left neck level 1, removal

- Submandibular gland, no carcinoma identified.
- Lymph nodes no metastatic carcinoma identified (0/3).

N: Lymph nodes, left neck level 2, removal

- No metastatic carcinoma identified (0/4).

O: Lymph nodes, left neck level 3, removal

- No metastatic carcinoma identified (0/10).

P: Lymph nodes, left neck level 4, removal

- No metastatic carcinoma identified (0/8).

Q: Lymph nodes, left neck level 5, removal

- No metastatic carcinoma identified (0/6).

R: Left oral commissure, removal

- Verrucous hyperplasia, involving mucosa at vermillion border, 9 mm to inked surgical margin.

Intraoperative Consult Diagnosis:

An intraoperative consultation is requested

FSA1: Anterior margin, left cheek skin, biopsy

- No tumor seen

FSB1: Superior margin, left cheek skin, biopsy

- No tumor seen

FSC1: Posterior margin, left cheek skin, biopsy

- No tumor seen

FSD1: Inferior margin, left cheek skin, biopsy

- No tumor seen

FSE1: Anterior left mandible periosteum, biopsy

- No tumor seen

FSF1: Left anterior mandible margin, biopsy
- No tumor seen

FSG1: Left anterior mucosal margin, biopsy
- Skeletal muscle with NTF; no mucosa present for evaluation

FSH1: Left inferior mucosal margin, biopsy
- No tumor seen

FSI1: Left posterior mucosal margin, biopsy
- No tumor seen

FSJ1: Left superior mucosal margin, biopsy
- No tumor seen

Frozen Section Pathologist:

Clinical History:
with left buccal mucosal carcinoma verrucous carcinoma vs. squamous cell carcinoma.

Gross Description:
Specimen A is received fresh for frozen section and is a 1.0 x 0.2 x 0.2 cm tan skin fragment that was previously frozen entirely as FSA1.

Specimen B is received fresh for frozen section and is a 7.0 x 4.0 x 2.0 mm yellow/red soft tissue fragment with scant tan skin, previously frozen entirely as FSB1.

Specimen C is received fresh for frozen section and is a 7.0 x 2.0 x 1.0 mm tan fragment of skin that was previously frozen entirely as FSC1.

Specimen D is received fresh for frozen section and is a 6.0 x 1 x 1 mm fragment of tan skin that was previously frozen entirely as FSD1.

Specimen E is received fresh for frozen section and is a 3.0 x 1.0 x 1.0 mm aggregate of two fragments of red/tan soft tissue that was previously frozen entirely as FSE1. One fragment was extensively dried onto the gauze pad.

Specimen F is received fresh for frozen section and is a 6.0 x 1.0 x 1.0 mm red/tan aggregate of two fragments of red/tan soft tissue that was previously frozen entirely as FSF1.

Specimen G is received fresh for frozen section and is a 1.0 x 1.0 x 1.0 mm red/tan soft tissue fragment that was previously frozen entirely as FSG1.

Specimen H is received fresh for frozen section and is a 4.0 x 2.0 x 2.0 mm fragment of yellow/red soft tissue that was previously frozen entirely as FSH1.

Specimen I is received fresh for frozen section and is a 4.0 x 1.0 x 1.0 mm fragment of yellow/red soft tissue that was previously frozen entirely as FSI1.

Specimen J is received fresh for frozen section and is a 6.0 x 1.0 x 1.0 mm fragment of yellow/red soft tissue that was previously frozen entirely as FSJ1.

Specimen K is received in a formalin-filled container and is a 0.7 gram fragment of pink/gray and cauterized soft tissue (2.0 x 0.5 x 0.5 cm); and inked black.

The specimen is serially sectioned to demonstrate a brown/gray cut surface. The specimen is submitted entirely in block K1.

Specimen L:

Specimen fixation: Formalin

Type of specimen: Left partial mandibulectomy and partial maxillectomy with attached cheek skin.

Size of specimen: 9.0 x 7.2 x 4.5 cm (skin 6.5 x 5.2 cm with a subcutaneous tissue depth of 2.1 cm, maxilla (5.1 x 3.2 cm) mandible (7.5 x 3.5 x 1.4 cm).

Orientation of specimen: The specimen is marked on the scan with a suture, per requisition, indicating anterior.

Inking: superior/blue, inferior/red, medial/black, lateral/yellow, anterior/orange, posterior/green.

Tumor description: The mass (3.6 x 2.1 cm), is well-demarcated, white/tan, soft, verrucous, and centrally ulcerated. The skin is tan/pink, and exhibits a gray/white, white nodule (2.1 x 1.1 cm), that is centrally ulcerated.

The nodule is 1.4 cm from the closest skin margin (anterior/inferior). On cut section, the mass is white/tan, friable, soft, verrucous.

Location of tumor: The mass is located in the left retromolar trigone region, extends to the buccal mucosa, goes through the soft tissue, and extends to the overlying skin.

Tumor size: Sectioning demonstrates that the mass is 4.0 x 3.5 x 2.5 cm.

Extent of tumor: The mass erodes into the posterior mandible and encases the periosteum. There is also a focus of periosteal erosion, abutting the maxilla. The previously described skin surface nodule is a direct extension of the mass.

Presence/absence of bone involvement: The mandible is infiltrated by the mass and there is a periosteal erosion that abuts the maxilla.

Distance of tumor from surgical margins: Anterior buccal mucosa 1.1 cm, posterior buccal mucosa 0.6 cm, superior buccal mucosa 0.5 cm, inferior buccal mucosa 0.9 cm, posterior mandibular margin 1.3 cm, anterior mandibular margin -1.5 cm, inferior soft tissue margin 0.5 cm, superior soft tissue margin 0.4 cm, superior maxilla margin 1.0 cm, medial soft tissue abuts, lateral soft tissue margin 0.2 cm, skin focally involves/extends to the skin.

Description of remainder of tissue: The remainder of the uninvolved mucosa is white, smooth and glistening. The remainder of the skin is pink/tan, hair-bearing and without additional lesions. Two apparent lymph nodes (up to 1.3 x 0.8 x 0.5 cm), were located in the surrounding soft tissue. On cut surface, both apparent lymph nodes are white and firm.

Tissue submitted for special investigations: No

Lymph nodes: Two apparent lymph nodes.

Digital photograph taken: Yes.

Block Summary:

- L1 - Anterior (orange) mucosal margin, perpendicular
- L2 - Posterior mucosal margin, perpendicular
- L3 - Anterior buccal mucosal margin, perpendicular
- L4 - Anterior mandibular margin, en face, following decalcification
- L5 - Superior mandibular margin, en face, following decalcification
- L6 - Posterior mandibular margin, en face, following decalcification
- L7 - Anterior maxilla margin, en face, following decalcification
- L8 - Lateral maxillary margin, en face, following decalcification
- L9 - Superior maxillary margin, en face, following decalcification
- L19 - Posterior maxillary margin, en face, following decalcification
- L11 - Mass with respect to floor of mouth and mandibular periosteum

L12 - Mass with respect to skin and skin surface nodule
L13 - Mass with respect to lateral (yellow) soft tissue margin, perpendicular
L14 - Mass with respect to inferior (red) soft tissue margin, perpendicular
L15 - Mass with respect to superior (blue) soft tissue margin, perpendicular
L16 - Mass with respect to medial (black) soft tissue margin, perpendicular
L17 - Posterior (green) margin, en face
L18 - Mass with respect to anterior (orange) soft tissue margin, perpendicular
L19 - Mass with respect to maxillary periosteal erosion, following decalcification
L20 - Mass with respect to maxillary sinus, following decalcification
L21 - Mass infiltrating mandible, following decalcification
L22-L23 - Two apparent lymph nodes, one in each, both bisected

Specimen M is received in a formalin-filled container and is a fragment of fibroadipose tissue (8.5 x 3.3 x 2.5 cm), that consists of a yellow/tan lobulated gland (4.5 x 2.7 x 1.5 cm) and three apparent lymph nodes (up to 1.4 x 0.8 x 0.5 cm). The gland is inked black, serially sectioned to demonstrate a tan/white lobular cut surface. No discrete masses are grossly identified. Within the gland, there is a small caliber vessel (1.0 cm in length x 0.3 cm in diameter). Representative sections of the gland are submitted in blocks M1 and M2 and the lymph nodes are submitted in block M3 (one is inked and bisected).

Specimen N is received in a formalin-filled container and is a fragment of fibroadipose tissue (4.9 x 3.5 x 1.5 cm), that consists of scant skeletal muscle (1.5 x 0.5 x 0.3 cm) and six apparent lymph nodes (up to 2.3 x 1.0 x 0.7 cm). A representative of the skeletal muscle is submitted in block N1 and the apparent lymph nodes are submitted in blocks N2 and N3 (N2 four apparent lymph nodes, one inked and bisected; N3 two apparent lymph nodes, both inked and bisected).

Specimen O is received in a formalin-filled container and consists of two fragments of fibroadipose tissue (5.5 x 3.5 x 1.5 cm, in aggregate), that consists of a red/brown skeletal muscle (3.5 x 1.5 x 1.0 cm) and ten apparent lymph nodes (up to 1.4 x 0.7 x 0.4 cm). A representative of the skeletal muscle is submitted in block O1 and the apparent lymph nodes are submitted in blocks O2 and O3 (O2 Six apparent lymph nodes (one inked and bisected); O3 three apparent lymph nodes, two inked and bisected).

Specimen P is received in a formalin-filled container and is a fragment of fibroadipose tissue (4.2 x 2.5 x 1.2 cm), that contains nine apparent lymph nodes, up to 1.4 x 0.8 x 0.3 cm. The apparent lymph nodes are submitted in blocks P1-P2 (P1 six apparent lymph nodes; P2 three apparent lymph nodes, one inked and bisected).

Specimen Q is received in a formalin-filled container and is a fragment of fibroadipose tissue (3.9 x 2.5 x 1.3 cm), that contains six apparent lymph nodes, up to 1.5 x 0.5 x 0.3 cm. The apparent lymph nodes are submitted in blocks Q1-Q2. (Q1 five apparent lymph nodes; Q2 one apparent lymph node, inked and bisected).

Specimen R is received in a formalin-filled container and is a 2.1 x 1.5 cm unoriented irregular excision of gray/tan hair-bearing skin with a subcutaneous tissue depth of 0.7 cm. The medial aspect is concave and is discloses a tan/gray smooth mucosa. The lateral half is inked blue and the medial half is inked black. The specimen is transversely sectioned from superior to inferior, and submitted entirely sequentially from superior to inferior, in blocks R1-R3, NTR.

Light Microscopy:

Light microscopic examination is performed. The frozen section diagnoses are confirmed. The close soft tissue margin in L16 is just inferior to the circular oral mucosa around the primary

