

Pathology Report
02/06/2007

Specimen:
Tonsil biopsy

Gross Description:

Specimen is received in formalin and consists of multiple irregular fragments of soft, tan soft tissue measuring 0.4 x 0.3 x 0.2 cm in aggregate. All blocked.

Comments:

Step sections reveal no evidence of invasive neoplasia in the biopsies submitted.

Final Diagnosis:

Right tonsillar area biopsy: Fragments of squamous mucosa with focal ulceration and granulation tissue formation. Reactive atypia of adjacent epithelium. Separate fragments of squamous epithelium with severe dysplasia.

Cytopathology Report
02/13/2007

Clinical History:

The patient is a 48-year-old male who noticed a right neck mass approximately three weeks ago. He has a right tonsillar mass which was recently biopsied with a diagnosis of severe dysplasia.

Physical Examination:

Physical exam of the neck revealed a right submandibular vaguely circumscribed, somewhat mobile rubbery mass measuring approximately 5 cm. The overlying skin is smooth and intact.

Specimen:

Mass - Smears received x 7

Gross Description:

7 stained slides

Aspirate Procedure:

After sterilization of the skin, three passes were made with 22 and 23 ½ gauge sterile needles with attached syringe. No local anesthesia given. The lesion felt soft with the needle tip. No cyst fluid obtained. Firm pressure applied after withdrawal of the needle with no visible bleeding.

Interpretation: Metastatic squamous cell carcinoma

Final Diagnosis:

Right Neck Mass: FNA: Satisfactory for evaluation. Metastatic squamous cell carcinoma.

Discharge Summary

Date of Admission: 03/18/2007

Date of Discharge: 03/23/2007

Reason for Admission: Patient is a 49-year-old gentleman with tonsillar cancer, admitted for severe mucositis, dehydration.

Hospital Course:

Following admission, the patient was admitted to MNO Center. The patient was placed on IV fluids, D5 half normal saline at 100cc/hr. Patient was given morphine 5 mg IV q. p.r.n. for severe mucositis and begun on Magic mouthwash. Patient was seen in consultation by Dr. C. Due to extensive mucositis and no oral intake, a feeding tube was placed on 03/19/2007 without incident.

On 03/20/2007, the patient had a temp of 101. Culture was obtained. The patient was begun on IV Fortaz. In addition, the patient complained of swelling of his left knee without erythema or heat. Patient was begun on PEG tube feedings. This was started on 03/20/2007 with Jevity at 33cc/hr. PEG was flushed with 150 cc of water every four hours. Residuals were checked. The patient tolerated the PEG tube feedings without problems. On 03/21/2007, the tube feedings were increased to 60 cc per day.

Due to continued swelling of his left knee, the patient was placed on Motrin, and the patient was seen in consultation on 03/22/2007 by Dr. G. Patient was thought to have bland arthritis, no clear evidence of infection or gout. Uric acid levels were normal. Patient had his joint aspirated. Cultures are pending at the time of this dictation.

On 03/22/2007, the patient was improved. IV fluids, IN Protonix were discontinued. IV morphine was changed to Roxanol. The patient was begun on progressive ambulation. Patient continued to have a low grade fever, approximately 100. On 03/23/2007, the patient was afebrile in the morning. Mouth had dramatically improved in terms of his mucositis. Patient was ambulatory, having his knee tapped. Patient was tolerating the PEG tube feedings and was subsequently discharged.

Final Diagnosis:

1. Severe mucositis
2. Tonsillar cancer with lymph node metastasis
3. Fever--? bacterial origin
4. Left knee arthritis
5. PEG tube placement

Discharge Instructions: Discharge diet is regular, Jevity 9 cans per day via PEG tube.

Discharge Medications

Magic mouthwash q.i.d.; Roxano 10 mg 3 hrs p.r.n.; Tylenol p.r.n.; Levaquin 500 mg a day times one week.

History & Physical
03/18/2007

Reason for Admission: Patient is a 49-year-old gentleman with a tonsillar cancer, admitted for dehydration and severe mucositis.

History of Present Illness:

I initially saw the patient 02/04/2007. The patient noted a swelling in the right side of his neck. He was referred to Dr. M. There was a lesion noted in the right tonsil. A computerized axial tomography scan showed a 2.4 cm mass at the base of the tongue on the right and a 3.2 cm necrotic node in the right submandibular fossa. The patient denied any throat pain, dysphagia-otherwise, the patient felt well. The patient did not smoke. He denies chewing tobacco. He had an occasional beer. The patient underwent biopsy by Dr. M times two of the tonsil which was notable for severe dysplasia without invasive neoplasia. Subsequently, a fine needle aspiration on 02/13/2007 was performed of the right neck mass which revealed metastatic squamous cell carcinoma.

The patient was presented to the Tumor Board and after much discussion, it was elected to begin the patient on chemotherapy, radiation therapy and consider surgery for his neck in the future. Due to a history of a solitary kidney, I elected to begin the patient on Taxotere chemotherapy and the patient was given weekly Taxotere at 20 mg per meter squared plus Amifostine. The patient began treatment on 02/12/2007 and has received weekly chemotherapy plus daily radiation therapy Monday through Friday. The patient has had increasing mouth sores. A feeding tube was discussed with the patient's wife, however, the patient declined, hoping that he could continue to be to swallow. Radiation therapy was stopped on 03/15/2007 due to increasing mucositis.

The patient presented to our office today with severe throat pain, inability to handle secretions, being unable to swallow and the patient was subsequently admitted. The patient denies any fevers or chills. The patient has lost approximately 25 lbs since beginning therapy.

Past Medical History: History of hypertension. History of solitary right kidney. The patient has no history of diabetes, thyroid, liver disease, cardiopulmonary disease.

Past Surgical History: Arthroscopic surgery, left knee

Allergies: None

Medications: Magic mouthwash

Family History: His father died of heart disease. Mother died of ? myxoma. One brother deceased of cirrhosis. Two brothers alive and well. One child alive and well. Married.

Social History: Works in trucking. Never smoked. Occasional alcohol use. Denies drug use.

Review of Systems:

Head, eyes, ears, nose and throat: Please see the History of Present Illness.

Lungs: Denies cough, hemoptysis, chest pain, dyspnea

Cardiac: Denies angina, paroxysmal nocturnal dyspnea, orthopnea, pedal edema

Gastrointestinal: Denies abdominal pain, diarrhea, constipation, blood in the stool

Genitourinary: Denies any hematuria, dysuria, flank pain

Musculoskeletal: Denies bone pain

Skin: Denies rash

Neurologic: Denies focal weakness, seizure activity

Physical Examination:

Vital Signs: Blood pressure: 90/60. Temperature: 97 degrees. Weight: 91.6 kg. Pulse: 80

Head, Eyes, Ears, Nose and Throat: Extensive mucositis in the oropharynx with erythema, whitish necrotic mucosa. No tonsillar lesion noted.

Lymph nodes: There is approximately a 3 cm right anterior cervical node- otherwise no adenopathy.

Lungs: Clear

Cardiovascular: Sinus rhythm

Abdomen: Soft

Extremities: No edema

Skin: Poor turgor

Neurological: Non-focal

Lab Data: Pending

Impression:

Forty-nine yr old white male with tonsillar cancer undergoing chemotherapy, radiation therapy. Presently the patient has developed 4+ mucositis due to combined modality therapy. The patient has had a good response in terms of his primary tumor, although he continues to have right neck adenopathy which may require surgery in the future. Due to the patient's inability to swallow, the patient is now admitted for intravenous hydration, Magic Mouth Wash and intravenous morphine and pain management. I have asked Dr. C to see the patient again regarding feeding tube, which the patient had previously declined.

Further decisions regarding management will be based on the patient's response to the above regimen and Dr. C's recommendation.

Consultation
03/18/2007

Reason for Consult: Dysphagia

History of Present Illness:

Patient is a 49-year-old male with a medical history significant for tonsillar cancer, who has significant dysphagia. He developed this now approximately five weeks ago after receiving three weeks of radiation therapy and two rounds of chemotherapy for his condition. He is also having pain and dysphagia which started now approximately three weeks ago. He has been able to swallow liquids only and was seen initially on 03/02/2007 for this symptom. At that point, we discussed options for feeds including percutaneous endoscopic gastrostomy, surgical gastrostomy, radiologic gastrostomy and/or intravenous feeding by central venous catheter and I had recommended attempt at a gastrostomy placed percutaneously. He, at the time, along with his wife had discussed this in detail and they decided they would try to see how he did by taking additional drinks orally. He was told to try to take about six cans of Boost per day and he has been coming nowhere near that. He had lost 15 lbs at the time when I saw him on the 03/02/2007 and lost an additional 14 lbs now. He is able to swallow his own saliva and he is able to swallow Boost, but not much more than that. He has copious amounts of mucous production, which has him spitting near continuously.

Past Medical History: As noted. Additionally he has a history of hypertension and hypercholesterolemia.

Medications: He was on Diovan. He is now on morphine 5 mg q. one hour p.r.n. and intravenous fluids with D5 half normal saline and 40 mcg of K at 100 cc an hour.

Allergies: None

Past Surgical History: Status post left inguinal hernia repair, status post left knee cartilage repair

Social History: He is married. He has one child. He is a nonsmoker. He has an occasional drink.

Family History:

Father is deceased and had coronary artery disease and diabetes. He died at the age of 52 of a myocardial infarction. Mother is deceased and had cancer "in her heart" and died at the age of 72. He has a brother who is deceased secondary to liver disease due to cirrhosis at the age of 53. He has three other brothers who are healthy.

Review of Systems:

He has no fevers, sweats or chills. He has no headaches or change in his vision. He has a cough which is due to the copious mucous production. He denies short of breath. He denies chest pain or palpitations. He has no nausea or vomiting, diarrhea or constipation. He does not have any numbness or weakness. He does not have a rash or itching. He has no back pains or joints. He has no bruising.

Physical Examination:

General appearance: He is a pleasant gentleman lying in bed in no acute distress.

Vital Signs: Temperature: 99.8. Pulse: 102. Respiratory Rate: 20. Blood pressure: 121/74

Weight: 197 lbs.

Head, Eyes, Ears, Nose and Throat: The eyes are anicteric. Conjunctiva is pink and moist.

Mouth is coated but dry mucous.

Neck: There is massive swelling in the right neck

Lungs: Clear to auscultation and percussion

Back: No costovertebral angle tenderness

Heart: Normal S1/S2 with a regular rate and rhythm. There are no murmurs, rubs or gallops.

Abdomen: Has normoactive bowel sounds and soft, non-tender, nondistended. There is no guarding or rebound. There is no hepatosplenomegaly or ascites.

Extremities: Have no cyanosis, clubbing or edema

Lab Data:

Complete blood count:		Glucose:	98
White count:	4,900	BUN:	15
Hemoglobin:	13.6	Creatinine:	0.9
Hematocrit:	38.8%	Calcium:	10.0
Platelet count:	271,000	Total protein:	7.1
Prothrombin time:	13.5 with an INR of 1.29	Albumin:	3.2
Partial thromboplastin time:	33.8	AST:	24
Sodium:	136	ALT:	71
Potassium:	3.8	Alkaline phosphatase:	65
Chloride:	98	Total bilirubin:	0.6 with direct 0.17
Bicarbonate:	31	Urinalysis:	Unremarkable

Assessment:

This is a forty-nine yr old gentleman with tonsillar cancer and now significant dysphagia. I believe at this point given the symptoms and the large amount of weight loss he has experienced, that an alternate method of feeding is clearly needed. We have discussed the alternatives previously and again this evening. At this point he is agreeable to have a feeding tube placed/attempted endoscopically.

Plan:

1. We will attempt endoscopic gastrostomy tomorrow
2. Antibiotics and mouth care on hold for procedure
3. Follow-up with pending results of this study and clinical course

Endoscopy Report
03/19/2007

Procedure: Upper endoscopy with gastrostomy insertion

Indications for Procedure: Dysphagia

Preoperative Diagnosis: Tonsillar cancer

Postoperative Diagnosis: Tonsillar cancer, esophagitis, gastrostomy placed

Procedure:

After informed consent was obtained, the patient was placed on the table in the supine position. Blood pressure cuff, pulse oximeter and electrocardiogram leads were attached to the patient for continuous monitoring. In addition, oxygen was running at two liters per minute via nasal cannula. After a mouthpiece was secured between the teeth, intravenous sedation was administered by Dr. N. Next, the Olympus flexible video upper endoscope was inserted into the mouth and passed under direct vision, past the cricopharyngeus into the esophagus, stomach and duodenum. The significant findings are as follows.

Findings:

Within the pharyngeal area there was significant evidence of ulceration with extensive exudate present. The endoscope was able to be maneuvered past this beyond the cricopharyngeus into the esophagus, stomach and duodenum.

Significant findings are as follows: again within the esophagus, there was evidence of distal esophagitis. This was seen in a linear fashion with minimal ulceration. The endoscope was passed easily into the stomach which revealed a normal appearing body, antrum and easily passable pylorus. The endoscope was then passed easily into the duodenum where the bulb and descending portions were normal. The endoscope was brought back into the stomach where retroflexion was performed revealing a normal incisura, fundus and cardia. The endoscope was then brought back into the stomach where air was insufflated and site chosen for insertion for gastrostomy placement.

The site was prepped and draped in the usual sterile fashion and a small incision was made. A #20 French gastrostomy was then placed in a typical push fashion. It was pulled to approximately 2 cm from the skin. The endoscope was reintroduced into the stomach which showed the bumper was sitting snugly up against the gastric wall. The scope was then removed without complication or biopsies taken. The patient tolerated the procedure relatively well.

Assessment:

This is a forty-nine yr old gentleman with tonsillar cancer and dysphagia as a result of significant weight loss, now status post percutaneous endoscopic gastrostomy placement.

Plan:

1. Post-PEG instructions including cleaning the site and dressing with Bacitracin
2. Check site in AM and if clean, would start feeds
3. Kefzol 1 gram six hours after this procedure
4. Protonix to begin at IV for now
5. Further management will depend on the clinical course and further study.

Radiology Report
03/20/2007

Single frontal view of the chest

Reason for Exam: Fever

The lungs are clear. The osseous and soft tissue structures are within normal limits.

Due to the AP nature of the film, the mediastinal structures cannot be properly evaluated but they appear to be normal in contour.

Impression: Negative, unchanged compared to 09/16/2006.

Addendum:

The portable chest of 03/20/2007 is compared with a prior study of 09/16/2006 and again demonstrates deformity of the mid left clavicle compatible with old fracture. There is no infiltrate, cardiomegaly, congestive heart failure or pleural effusion.

Impression:

Probable old fracture left clavicle, otherwise no active disease or change compared to 09/16/2006.

Radiology Report
05/19/2007

CT scan of soft tissue of the neck with contrast

Clinical History: Tonsillar carcinoma

The patient is status post chemotherapy and radiation therapy for the tonsillar neoplasm. The current study demonstrates that the soft tissue mass noted in the oropharynx on the right side at the base of tongue and extending to the right parapharyngeal space appears somewhat smaller, as does the necrotic submandibular mass on the right previously measuring 3.2 cm and currently measuring 2.0 cm. No evidence of any new masses.

The degree of posteromedial displacement of the right jugular vein has lessened to some degree. There is evidence for increased prevertebral soft tissue swelling noted, both on axial views as well as the lateral scout view. There is also some infiltration of the pre-epiglottic fat and soft tissue posterior to the hyoid bone. There is also some mild narrowing of the airway at the level of the hypopharynx, presumably related to post-radiation edema.

There is no evidence of any destructive bony abnormalities. The soft tissue changes within the maxillary sinuses appear to have worsened slightly since the prior study. Again noted is a soft tissue density within the left sphenoid sinus. Sections through the upper lung apices reveal no pleural or parenchymal abnormalities.

Impression:

1. The soft tissue mass in the oropharynx on the right side at base of tongue, as well as the necrotic mass in the submandibular region on the right side, have decreased in size compared to 01/30/2007. There is no evidence of any new masses in the neck suggestive of additional lymphadenopathy.
2. There is evidence for prevertebral soft tissue swelling and infiltration of the pre-epiglottic fat, particularly at the level of the hypopharynx, with mild airway compromise at this level not appreciated on the prior study, which is presumably related to the sequelae of radiation therapy. There is also infiltration and induration of the anterior strap muscles

Medical Clearance Note
05/26/2007

Family History:

Father deceased at age 52 of coronary disease and diabetes, had a myocardial infarction. Mother deceased with cancer in the cardiac area and died at age 72. Brother deceased secondary to liver disease and cirrhosis at age 53. Two other brothers are healthy.

Allergies: Negative

Past Surgical History:

1. Status post left inguinal repair
2. Status post knee cartilage repair
3. PEG tube put in by Dr. C.

Social History: Married, has one child, non-smoker, occasional alcohol.

Medications: Roxanol, Compazine, Salagen, Magic mouth wash, Ambien p.r.n., was on Diovan in the past; at the present time is doing relatively well.

The patient sleeping habits is overall well. He has some occasional difficulty falling asleep but not on a persistent basis.

Review of Systems:

He has no fever, sweats, chills. No headaches, change in vision. He has a history consistent with a recent tonsillar carcinoma and apparently is undergoing therapy, both radio therapy and additional therapy with Dr. K, and undergoing surgical therapy at the present time.

The patient most recently was found to have tonsillar cancer with dysphagia, with a lesion on the right side of the neck area. He received three weeks of radiation therapy and two rounds of chemotherapy. He had some pain and dysphagia and a question of endoscopic tube placement was noted, as need for tube placement and at that time was done by Dr. C.

The patient denies at the present time any other complicating factors. No gastrointestinal or genitourinary symptoms noted. Most recently saw Dr. L, doing quite well and using less morphine at the present time.

Most recent laboratory studies have revealed:

Cholesterol	170
Blood sugar	127
Hemoglobin	12.9
Sedimentation rate	61
PT/PTT levels	Normal
TSH levels	Normal
Urinalysis	Normal

Physical Examination:

General Appearance: Well developed, well nourished, extremely pleasant male.

Vital Signs: Blood pressure 110/70. Pulse 82. Respiratory rate 18.

Head: Normocephalic

Neck: There was a slight fullness on the right side of the neck area and with some edema at the point in time.

Chest: Symmetrical, without splinting. No rales, rhonchi, wheezing or E/A change.

Cardiovascular: Sinus rhythm. S1, S2 is normal. No S3 gallop.

Abdomen: Soft. No mass. Liver, spleen, kidney not palpable. Bowel sounds normoactive. There was a gastrostomy tube in place.

Extremities: No edema. Homans sign was negative.

Discharge Summary

Date of Admission: 06/03/2007

Date of Discharge: 06/16/2007

History of Present Illness:

The patient was admitted for surgical management of his neck. He had a history of tonsillar cancer, metastatic to the right neck; initially presenting in 01/2007. He was treated with radiation and chemotherapy which was completed in 04/2007. His large 5 cm lymph node had decreased to about 3 cm in size; it was present at Level II of the neck.

In addition, he also had a right hard tonsillar mass within the right tonsillar fossa.

Hospital Course:

Given these findings, he was brought to the OR for partial pharyngectomy and modified right neck dissection. The procedure was performed on 06/03/2007, without any complications.

Postoperatively, the patient did not have any complications. He was discharged once the drain output was adequate for drain removal. He was not taking feeds orally well; however, G-tube feeds were administered.

He was sent home for follow-up in one week, with analgesics. His final pathology revealed a single necrotic tumorous lymph node, with no additional spread into the neck.

History & Physical
06/03/2007

Procedure:

Right neck dissection as well as a right partial pharyngectomy and possible AlloDerm graft.

History of Present Illness:

The patient has a history of tonsillar carcinoma metastatic to the right neck. He initially presented with a 5 cm lymph node in 01/2007. He was treated with radiation and chemotherapy which was completed in 04/2007. He has residual lymphadenopathy of the right neck. His node has decreased in size to approximately 3 cm and is present at level 2 of the neck. Also on examination he still has a hard tonsillar mass within the right tonsillar fossa. Given these findings, informed consent was obtained for him for neck dissection for clearance of possible residual disease as well as the wide-field tonsillectomy for possible residual pharyngeal disease.

Past Medical History: Only relevant for hypertension

Medications: Diovan

Social History: Moderate alcohol intake and no current tobacco intake

Family History: Family history of diabetes

Physical Examination:

As stated, he is alert and oriented.

Head, Eyes, Ears, Nose and Throat: Cranial nerves III through XII intact. He has a right tonsillar mass which is firm to palpation. He has right lymphadenopathy at level 2, approximately 3 cm and is moveable, not fixed.

Fiberoptic examination - he has mild basal tongue and epiglottic edema, thickening of the vocal folds, but no detectible lesions.

The remainder of the physical exam and optimization will be performed by his primary doctor.

Lab Data:

Consisted of a computerized axial tomography scan of the neck, postoperatively performed on 05/19/2007, revealed a residual 3 cm cystic lymph node, complex in composition of the right neck. No additional significant findings with the exception of a circumscribed possible lipoma of the right cheek.

Impression:

Squamous cell carcinoma of the tonsil, metastatic to the neck with partial response to medical therapy. The patient presents for the above procedure. Full consent was obtained with regards to the procedure which includes the risks, benefits and alternative and risks of no treatment. The risks of the procedure include bleeding, numbness, cranial nerve deficits involving the shoulder, tongue and lip, phrenic nerve paralysis among other risks. The patient consents.

Neurologic:

Intact cranial nerves II/XII. Motor and sensory revealed no hemiparetic or hemisensory defects. Reflexes 2+ bilaterally and symmetrical.

Impression:

History of tonsillar carcinoma for neck dissection and past history of hypertension, history of a gastrostomy tube in place. The plans have been outlined. Medical risks have been explained to the patient. Will follow as you deem necessary.

Operative Report
06/03/2007

Preoperative Diagnosis: Tonsillar cancer metastatic to the right neck

Postoperative Diagnosis: Same

Operative Procedure: Right partial pharyngectomy. Right selective neck dissection lymph node levels one through three.

Anesthesia: General endotracheal anesthesia

Complications: None

Blood Loss: About 200cc

Specimen: Neck contents. This included levels one through three with level one marked with a single suture. Level two marked with a two-tail suture and level three marked with a three-tail suture. Additional level two specimens from the submuscular recess were sent separately. There was also a tonsil and pharyngeal specimen from the right hand side.

Indications: The patient presented with a cervical lymph node in 01/2007 which was metastases from the right tonsil. The patient chose to undergo primary chemoradiation. While the node regressed partially at the completion of the treatment, he did not have full response radiologically and hence he presents for a post-radiotherapy neck dissection. In addition, he presents for partial pharyngectomy and removal of the tonsil, to remove possible residual disease. Informed consent was obtained for the procedure after a very elaborate discussion.

Procedure: He was placed in a supine position after induction of general endotracheal anesthesia. The mouth gag retractor was inserted into the oral cavity atraumatically.

The Coblation unit was then used at settings of 9 for Coblation and 4 to 5 for cautery in order to perform a wide dissection of the tonsil. Excision was performed of the right tonsil, including the anterior tonsillar pillar as well as the portion of the superior constrictor and a good portion of the palatopharyngeus.

Cautery was applied judiciously for complete hemostasis. In this fashion, the tonsil and surrounding tissue were removed. Some parapharyngeal fat exposure was seen and sutures of 2-0 Vicryl were placed for approximation where possible. Having completed this portion of the procedure, the neck dissection was performed.

For this, a Schobinger incision was outlined in the neck essentially extending from the mastoid and curving inferiorly toward the clavicle and then curving superiorly again toward the anterior mandible. The incision was performed after prepping and draping the neck in the usual sterile fashion.

Subplatysmal flaps were then raised superiorly and inferiorly. Superiorly to the level of the mandible keeping the platysmal flap thin and inferiorly to the level of clavicle. The great auricular nerve was identified and not severed. Having done so, the sternocleidomastoid was then delineated using cautery as well as sharp and blunt dissection in order to begin the posterior dissection and identification of the spinal accessory nerve.

The residual tumor was palpated at level two of the neck and given this; a cuff of sternocleidomastoid muscle was taken along as part of the dissection in order to include a possible tumor involvement of the muscle in the specimen. The posterior border as described was then elevated both sharply as well as with cautery.

The spinal accessory nerve was then identified superiorly and entering the muscle as well as descending low in the neck. It was traced also superiorly and it was noted to dive under the internal jugular vein. The external jugular vein was in significant proximity of the tumor and hence it was decided to also include this vein in the specimen, hence it was ligated inferiorly.

The level one and two dissection was next performed. For this, blunt dissection was performed. First, I identified the marginal mandibular branch of the facial nerve. After significant dissection over the submandibular gland, the nerve was identified in a very superior position, just at the border of the mandible. Facial artery was then clamped, ligated and divided.

Several small facial veins were also ligated and divided. Delineation was then performed toward the midline using cautery, identifying the anterior and posterior digastric muscles. The midline was identified and delineated. Dissection was performed inferiorly where the omohyoid was also identified. The dissection then continued clearing the fibrofatty tissue from level one of the neck off the anterior digastric.

Next, the omohyoid muscle was identified. Its fibers were spread and fanned over the submandibular gland but eventually the muscles clearly identified and retracted medially where the lingual nerve was then identified deep to it. The lingual nerve was then released from the submandibular gland and then the duct was divided and sutured.

The facial artery was then identified and likewise divided after clamping and was ligated. After retraction of the gland including the posterior belly of the digastric, the hypoglossal nerve was identified. At this point, now having identified the level of the marginal mandibular branch as well as the level of the pertinent nerves in the superior neck, cautery was applied taking the tail of the parotid as well as considerable fibrofatty tissue in level two of the neck.

Next, posterior dissection was performed tracing the various cervical nerve rootlets down to the level of the floor of the neck or the carpet of the neck. Blunt dissection was performed and fibrofatty nodal tissue was swept from levels two and three to the inferior level of the omohyoid. Having done so and having identified now the scalene muscles, this tissue was then swept medially.

The internal jugular vein was identified both inferiorly and superiorly and thus its sheath was lysed posteriorly and then blunt and sharp dissection was performed to release the fibrous tissue from the internal jugular vein and completely release it of its course superiorly. This allowed the surgeon to then incorporate the fibrofatty posterior nodal tissue in the main specimen by flipping it under and around the internal jugular vein.

The common facial vein was taken at its entry point into the internal jugular vein, given that it was in direct proximity with the tumor at the level two nodal group. Likewise, the hypoglossal nerve was traced superiorly and proximally in order to complete the level two dissection. The venae comitantes were ligated including a branch of the occipital artery.

Tissue was then swept downwards. Dissection was performed releasing the carotid artery and vagus from the nodal tissue and cautery was then used to completely release the entire specimen from the floor of the neck. The submuscular recess was then dissected bluntly as well as using cautery. In order to remove possible additional nodal level two tissues, a lymph node was identified grossly and included with that specimen.

There was no significant bleeding. Copious irrigation was performed followed by closure. Closure was performed using multiple sutures of 3-0 Vicryl followed by a continuous suture of 4-0 nylon. A Hemovac drain was used for postoperative hemostasis. The patient was awakened and extubated in good condition.

Pathology Report
06/03/2007

Clinical History: Tonsil CA

Specimen:

- A. Right tonsil
- B. Right neck dissection with ties
- C. Submuscular triangle

Frozen Section:

Fibrotic tonsil. No malignancy identified on one frozen section.

Gross Description:

- A. Specimen is received fresh for frozen section and consists of an irregular fragment of tonsillar tissue measuring 4.2 x 1.5 x 1.0 cm with focal cryptic shiny tan surfaces. On sectioning, the tissue is the white-tan with focal areas of hemorrhage. A representative section is taken for frozen section. The specimen is entirely submitted.
- B. Specimen is received in formalin and consists of a right selective neck dissection composed of salivary gland with surrounding fibroadipose tissue, measuring 3.5 x 2.5 x 2.0 cm. Portion of jugular vein measuring 5.5 cm in length and portion of skeletal muscle measuring 5.5 x 4.0 x 2.5 cm, with surrounding fibroadipose tissue.
The specimen is oriented as follows:
 - Level I Single stitch
 - Level II Double stitch
 - Level III Three stitches

The specimen is sectioned according to these levels. Cut sections of the salivary gland shows lobulated soft yellow tan tissue with no gross lesions identified. Upon opening the jugular vein, no gross tumor mass is identified. Sections of the skeletal muscle are grossly unremarkable. Multiple lymph nodes are identified measuring from less than 1.0 cm to the largest one located in level II measuring 2.4 cm in maximum dimension.

On cut sections, the largest lymph node is bright yellow, hemorrhagic, soft, and focally cystic with surrounding shiny white fibrotic capsule. The remaining lymph nodes show grayish-tan cut surfaces.

Sections are submitted as:

Level I

- 1= Single left lymph node
- 2= Single lymph node
- 3= Salivary gland
- 4= One lymph node, salivary gland and adipose tissue
- 5= Salivary gland

6= Salivary gland and one lymph node

Level II

7= Three lymph nodes

8= Largest lymph node

9= One lymph node and vein

10= One lymph node

11= Adipose tissue

12= Skeletal muscle

13= Four lymph nodes

Level III

14= One lymph node

15= Two lymph nodes

16= Two lymph nodes

17= One lymph node and soft tissue

- C. Specimen is received in formalin and consists of an irregular fragment of fibroadipose and muscular tissue measuring 3.5 x 1.8 x 0.4 cm. Also received is an irregular fragment of soft dark tan tissue measuring 1.0 x 0.5 x 0.4 cm. The specimen is entirely submitted.

Final Diagnosis:

- A. Right tonsil, tonsillectomy: Tonsillar and glandular tissue showing focal mucosal erosion, hyalinization, fibrosis and mild chronic inflammation. No residual carcinoma identified.
- B. Right selective neck dissection: Single lymph node with necrotic tumor in level II (2.4 cm in maximum dimension). Twenty one lymph nodes, negative for metastatic carcinoma (0/21). Salivary gland, skeletal muscle and jugular vein, negative for malignancy. No viable tumor identified.
- C. Soft tissue, submuscular triangle, excision: Five lymph nodes negative for metastatic carcinoma (0/5).

Radiology Report
02/01/2008

CT Scan of Neck

Computed tomography of the neck was performed following the administration of IV contrast. A prior examination from 05/19/2007 is available for comparison.

The patient is status post neck dissection on the right. There is increased soft tissue density identified within the right side of the neck, likely due to post operative scarring/granulation tissue. No mass-like densities to suggest tumor recurrence is identified. The Eustachian tubes, toru tubarius, and fossa of Rosenmueller are unremarkable. There is no compression upon the visualized airway. The true vocal cords are symmetrical.

The fat of the parapharyngeal space is symmetrical. The superficial and deep lobes of the parotid glands are normal in appearance. The left submandibular gland is unremarkable. There is a left parotid sheath and left posterior triangle adenopathy which is reactive by size criteria.

The lung apices are unremarkable.

Polypoid mucoperiosteal thickening is identified within the maxillary and sphenoid sinuses bilaterally.

Impression:

Status post right-sided neck dissection. No recurrent or residual neoplasm is appreciated on this examination.