Pathology Report
01/06/2007

Clinical History: The working diagnosis is breast cancer.

Specimen:
Core biopsy left breast

Gross Description:
A single specimen is received in formalin labeled core biopsy left breast and consists of four white tan core biopsies which range in size from 1.0 to 0.5 cm in length x 0.1 cm in diameter. The specimen is entirely submitted in screened A1.

Microscopic Description/Comment:
I have reviewed all diagnostic slides and have edited the gross and/or microscopic portion of this report as part of my pathologic assessment and final diagnosis.

Final Diagnosis:
Breast, left, needle core biopsy: Invasive well differentiated mammary carcinoma with focal lobular features (grade 1, architecture 3, nuclear 1, mitosis 1) (see comment).

Addendum Diagnosis:
Strongly positive immunohistochemical stains for estrogen receptor and progesterone receptor. Negative immunohistochemical stains for her-2/neu (cerb-2).

Addendum Comment:
Both positive and negative controls stained appropriately.
Immunohistochemically the tumor is strongly positive for both estrogen receptor (more than 90% of the tumor cells) and progesterone receptor (more than 90% of tumor cells).
Immunohistochemically the tumor is negative for HER-2/neu.

ICD 9: 174.9 malignant neoplasm breast NOS (female)

SNOMED Codes: A: m852031 (\r\m852031), p1140 (biopsy, NOS), t04000 (breast, NOS), t04030 (female breast, left) F: a: 88305, 67030-er, 88342 immunocy, 67031-pr, 88342 immunocy, 67612, 88342 immunocy

Radiology Report
01/08/2007

Baseline Mammogram

The left breast was not imaged today due to extensive pain from probable neglected carcinoma. The left breast will be evaluated clinically.

Right breast: There is an approximately 1.0cm lobulated, isodense mass at approximately 3:00 with an associated coarse calcification.

To further evaluate mammographic findings, a right ultrasound was performed. There is an 8 mm cluster of cysts at 4:00, which may correspond to the mammographic mass; will follow. There is also a 1.l cm oval, hypoechoic mass at 10:00; will also follow.

The mammogram was read with assistance of CAD.

The patient was seen today by the CBCC Surgery Team. They discussed the findings as well as our recommendations with the patient and a printed lay language version of the imaging report was given to the patient at the time of the visit.

Finding is probably benign.

A followup at short interval. Short interval follow-up in 6 months.

Radiology Report
01/13/2007

CT Chest, Abdomen, and Pelvis with Contrast

Indication: Breast cancer

Technique: Multiple axial images were obtained through the chest, abdomen, and pelvis after administration of intravenous and oral contrast.

Findings:
CT Chest: There is a 6.2 x 8.6 large heterogeneous mass in the left breast with multiple small adjacent satellite lesions noted in the left breast tissue. There are multiple enlarged left axillary lymph nodes, the largest of which measures 2.8 x 1.7 cm. The skin overlying the breast mass is thickened. There is also an enlarged interpectoral lymph node which measures 2.6 x 1.2 cm. Lungs appear clear. There is no mediastinal adenopathy. No bony lesions are seen in the chest.

CT Abdomen: There is a single large stone in the gallbladder. The liver appears subtly nodular which may represent cirrhotic change. Other solid abdominal organs are unremarkable. There are no abnormal masses or evidence of lymphadenopathy in the abdomen. Intra-abdominal portions of the GI tract are unremarkable.

CT Pelvis: pelvic soft tissues are unremarkable in appearance. There are no abnormal masses or fluid collections. No bony lesions are seen.

Impression:
1. Breast cancer with adjacent enlarged axillary and interpectoral lymph nodes
2. Large gallstone
3. Possible cirrhosis

I have personally viewed the images and concur with the final edited report.

Radiology Report
01/13/2007

Whole Body Bone Scan

Technique: Routine whole body imaging was performed and supplemented with oblique projection images of the chest, lateral projection images of the knees, a medial projection image of the feet and ankles, and a palmar projection image of the hands and wrists. No prior study is available for comparison.

Findings and Impression:
Images show:

1. Abnormally increased tracer localization in the lower lumbar spine (L4-L5). Differential includes metastatic disease as well degenerative disc disease or facet arthritis/sclerosis. Recommend radiography in attempt to identify benign explanations for this uptake.
2. Questionable right hip arthritis. Please radiograph this site for confirmation, as well.
3. Abnormally but symmetrically and localized increased uptake in the medial wrists bilaterally, most likely arthrosis involving bilateral 1st MCC joints.
4. Abnormally increased uptake about the knees and in multiple bone structures of both feet. Findings favor arthritis or arthrosis.
5. Increased localization within the left breast, which is a non-specific finding, which could reflect tumoral uptake or even recent iatrogenic manipulation.
6. Although the request states ....bone mets, and with the potential exception of items #1 and #2 above, the study shows no specific evidence of bony metastases.

Discharge Summary

Date of Admission: 08/02/2007

Date of Discharge: 08/03/2007

Discharge Diagnosis: Left breast cancer

Operations and Procedures: Left modified radical mastectomy

Brief History: This is a 50-year-old, white female with a neglected left breast cancer. She originally presented January 2007 with a large ulcerated left breast cancer, been treated medically with some regression of the cancer, some regression of the mass size, and has now had the previous image and operation. For details of the operation, please refer to the OP note.

Following the operating, the patient was admitted to the Surgery Service for 23 hour observation. During that time her pain has been well controlled with Percocet. She is on a regular diet and tolerating food. She has no other complaints. The patient will be sent home with two Jackson-Pratt drains and will receive Jackson-Pratt care training. She is to return to the Breast Center on August 10, Tuesday.

Discharge Medications: Percocet 5/325 1-2 tablets p.o. q.4-6 hours p.r.n., dispense #50 and D.O.S. 240 mg p.o. b.i.d. while on the Percocet.

The patient has been advised of her follow up appointments and has been advised to please contact Surgery Service if she has any questions before her next schedule appointment.

Operative Report
08/02/2007

Preoperative Diagnosis: Ulcerated left breast cancer

Postoperative Diagnosis: Ulcerated left breast cancer

Operative Procedure: Modified radical mastectomy left breast

Anesthesia: General

Specimen: Left breast and axillary contents

Drains: Two Jackson-Pratt drains

Estimated Blood Loss: Less than 30 ml

Complications: None

Indications: The patient is a 63-year-old female who presented with a long-standing neglected left breast cancer which had ulcerated through her skin of the left breast. She was treated with hormone therapy and had significant shrinkage of this area. Surgery was consulted as her primary physician felt it was time to excise this area if we could get primary closure. It was felt that we would be able to get primary closure and the risks and benefits of a modified radical mastectomy were explained to the patient and informed consent was obtained.

Procedure: The patient was brought to the operating room and placed in a supine position. The area was prepped and draped in normal, sterile fashion. A large elliptical skin incision was made, being sure to include all of the involved skin. The skin incision was continued down using electrocautery. Superior, lateral, medial and inferior flaps were raised, being sure to maintain hemostasis as we went this was taken down all the way to the level of the pectoralis muscle and the breast was lifted away from the pectoralis muscle, being sure to remove all fascia in a medial to lateral fashion. At the level of the tumor, the pectoralis muscle was edematous and a small amount of muscle was taken with the specimen, but there was no direct extension into the muscle bed. We then continued with our axillary dissection, being sure to find the thoracodorsal nerve, the long thoracic nerve and the axillary vein and removing all lymph nodes within this space. This was taken with the breast and sent as specimen, sent to pathology for permanent section. There were lymph nodes that were clinically suspicious during our dissection and we were careful to remove all of these with our specimen. The long thoracic and thoracodorsal nerve were preserved. This was confirmed after the specimen had been removed. Hemostasis was achieved using electrocautery and the site was copiously irrigated. Two Jackson-Pratt drains were place, one in the axilla and one under the skin flaps. These were tied securely in place with drain sutures. The subcutaneous tissue was reapproximated using an interrupted Vicryl suture and the skin was reapproximated using skin staples. A sterile dressing was applied and the patient tolerated the procedure well and was transferred to the postanesthesia care unit in stable and extubated condition.

Pathology Report
08/02/2007

Clinical History:
The working diagnosis is left breast cancer. Operative procedure modified radical mastectomy of left breast.

Specimen:
Left breast and axillary contents

Gross Description:
A single specimen is received fresh labeled left breast and axillary contents. The entire specimen consists of an ellipse of skin with underlying yellow fatty tissue and axillary contents. The entire specimen measures 26.0 cm from medial to lateral, 13.0 cm from superior to inferior and 3.0 cm from anterior to posterior. The fragment of skin measures 15.0 x 5.0 cm, is tan with a possible wrinkled, inverted nipple centrally which measures 1.3 x 1.0 cm. This occurs 1.0 cm from the cut inferior skin margin. Surrounding the nipple is a firm mass with roughened possible ulcerated skin measuring a dimension of 5.0 x 5.0 cm. Serial sectioning reveals a firm circumscribed mass located in the lower medial portion of the specimen measuring 5.0 x 5.0 x 4.0 cm. The mass is firm, yellow tan with specks of necrosis. It occurs approximately less than 1 cm from the deep margin, 0.4 cm from the superficial margin, 2.5 cm from the inferior margin, 3.0 cm from the medial margin, 5.5 cm from the superior margin, 8.0 cm from the lateral margin. Palpating through the axilla grossly positive nodes are identified. The largest node measures 2.0 cm in dimension.
Summary of Sections:

A1	Nipple
A2-A3	Tumor to deep
A4-A5	Tumor to skin
A6-A7	Tumor to inferior
A8	Representative tumor
A9	Left upper lateral quadrant
A10	Left lower lateral quadrant, All left upper medial quadrant
A12-A21	Possible lymph node

Microscopic Description/Comment:
Breast mass bx/mastectomy/wire localization
Type of Specimen: Modified radical mastectomy
Location of Tumor (side; quadrant): Left breast
Histologic Type: Ductal adenocarcinoma
Size of Tumor (include previous material if applicable): Hard to measure, grossly at least 5 cm, more extensive tumor involvement microscopically
Resection for: Mass
Elston Modification of Bloom-Richardson Grading (since this is post treatment specimen, grading is from the pretreatment biopsy)
Architectural Score: 3/3 Nuclear Score: 1/3 Mitotic Score: 1/3
Total Score: 5/9

Grade (1, 2, 3): I
Ductal in situ carcinoma: since the tumor extensive necrosis, presence of DCIS and LIN cannot be evaluated with certainty
Nipple Involvement: Extensively
Skin Involvement: Tumor extends to the deep dermis extensively but no lymphatic carcinomatosis is noted
Surgical Margins of Resection: Very close to the deep margin
Tumor Distance to Closest Margin: Less than 1 mm in the deep resected margin (A2)
Vascular/Lymphatic Invasion: Hard to evaluate
Tumor submitted for immunostaining ER/PR: Previous biopsy, strong positive for both estrogen receptor and progesterone receptor
Tumor submitted for immunostaining HER-2/Neu: Previous biopsy, negative for HER-2/neu
Wire Localization Performed: No
Other significant breast findings: Fibroadenoma
Axillary Lymph Nodes (positive/total): 10/32
Extracapsular Extension: Yes, in many lymph nodes
Size of Largest Positive Lymph Node: 1.3 cm
Primary Tumor (T) (This is post treatment staging; yp staging) T4a Extension to chest wall not including pectoralis
Regional Lymph Nodes (N): N3 Metastasis in 10 or more axillary lymph nodes, or in infraclavicular lymph nodes, or in clinically apparent ipsilateral internal mammary lymph nodes in the presence of 1 or more positive axillary lymph nodes; or in more than 3 axillary lymph nodes with *clinically* negative *microscopic* metastasis in internal mammary lymph nodes; or *in* ipsilateral supraclavicular lymph nodes
Distant Metastasis: MX Distant metastasis cannot be assessed

Comment:
Although the tumor shows extensive *necrosis,* at least 30% of the tumor *is* still viable. Many involved *axillary* lymph nodes show marked *histiocytic* and fibrotic reaction with few residual tumor cells. I have reviewed all diagnostic slides and have edited the gross and/or microscopic portion of this report as part of my pathologic assessment and final diagnosis.

Final Diagnosis:
Breast, left, modified radical mastectomy: Invasive ductal adenocarcinoma with nipple involvement (ypT3, N3, MX) (status post neoadjuvant treatment). Lymph node, left axillary, excision: Metastatic adenocarcinoma with extensive extracapsular involvement (10/32).

ICD 9: 17.4.9 Malignant Neoplasm Breast NOS (Female)
196.9 Malignant Neoplasm Lymph Node Nos (Secondary)

SNOMED Codes:
A: M85003 (Infiltrating duct carcinoma), P1100 (Excision, NOS), Pl121 (Excision, radical or extended with lymph node dissection), T04030 (Female breast, left), T04100 (Nipple) B: M81406 (Adenocarcinoma, metastatic, NOS), P1100 (Excision, NOS), T08710 (Axillary lymph node), TY8120 (Left axillary region) F: A: 88309

Clinic Note
08/22/2008

Chief Complaint: Here for routine six-month follow-up visit

Brief History: Patient is a 64-year-old lady who was diagnosed with a left primary breast cancer in January 2007. She presented with a large neglected breast cancer that was ulcerating through the skin with matted axillary lymph nodes. She had no evidence of distant metastatic disease. She underwent a left modified radical mastectomy and was found to have 10/32 axillary lymph nodes involved with metastatic disease. Estrogen and progesterone receptors were positive and HER-2 was negative. She was placed on Femara preoperatively and then underwent a left modified radical mastectomy in August 2007. This was a T4a tumor extending to the chest wall, not including the pectoralis muscle. She received postoperative AC times four cycles and then was placed back on Femara and continues on this therapy. She also completed left chest wall radiation. Her last screening mammogram of the right breast was done February 21, 2008 and was felt to be overall stable and suggested follow-up in one year.

Subjective: Patient states that she is tolerating her Femara therapy very well. She denies any chest pain, shortness of breath, cough or cold symptoms, fevers, chills, abdominal discomfort, or change in bowel or bladder pattern. She has been eating and drinking as usual and able to perform her activities of daily living as usual. She states that she did see her family doctor about her bone density scan and she was given a prescription to start Fosamax every week, but the patient did not want to start on this therapy because she was afraid that she may have an upset stomach with it because she was told this was one of the side-effects. She states that she does walk every day and she does drink a lot of milk products.

Objective: Blood pressure is 131/73, heart rate 77, respirations 12, and weight is 134 pounds. Labs done today: Glucose 138, BUN 10, creatinine 0.6, sodium 139, potassium 4.2, chloride 105, C02 29, total calcium 9.5, AST 24, ALT 20, alkaline phosphatase 146, total bilirubin 0.6, total protein 6.7, and albumin 3.7. General: No acute distress. Respirations even and unlabored at rest. Skin: Warm and dry. No rash or lesions.
Heart: Regular rate and rhythm. No rub, murmur or gallop. Lungs are clear to auscultation bilaterally. Left chest wall is without any masses or nodules. Right breast is soft without any masses, nodules, tenderness, skin dimpling or nipple exudate. Abdomen: Soft, nontender, no hepatosplenomegaly.

Assessment and Plan:
1. Left primary breast cancer diagnosed in January 2007: This was a neglected breast cancer for which the patient underwent a left modified radical mastectomy and was found of 10/32 axillary lymph nodes involved with metastatic disease. She received Femara preoperatively and then postoperatively, she completed four cycles of AC chemotherapy and was placed back on her Femara therapy and she also completed a left chest wall radiation. She will return to clinic in six months (February, 2009) with a right mammogram and comprehensive metabolic panel. She will return in the interim with any problems or complaints.

2. Osteoporosis with a bone density scan done February 21, 2008 showing a T-score of negative 2.5 in the femoral neck, in Ward triangle with a T-score of negative 2.3. She was encouraged to take Boniva 150 mg by mouth each day and she was given a prescription for this today, and the patient was agreeable to try this therapy. She was instructed to take the medicine on an empty stomach with a full glass of water and stand for 30 minutes to avoid any G1 side-effects, and the patient did verbalize understanding.