ICD-O-3
Carcinoma, duct, infiltrating and lobular 8522/3
Path. Site Code: breast, upper outer quadrant C50.4
CQCF: breast, NOS C50.9
1/17/11

Surgic:

UUID:889D6E80-A656-49FA-9DFA-1674EB3877F6
TCGA-B6-A0RP-01A-PR Redacted

Surg Path

CLINICAL HISTORY:
Biopsy of right and left breast in On the right side we only did a limited dissection of nodes.

GROSS EXAMINATION:
A. "Left breast and axilla", fresh. Received is a left modified radial mastectomy specimen consisting of skin, breast tissue and attached axillary tail. The skin ellipse measures 21 x 10.5 cm. The nipple and areola are located centrally on this. The nipple is retracted. There is a partially healed incision site running circumferentially around the lateral areola from approximately the 1:00 to the 4:00 position which measures 4 cm in length. No additional skin lesions are noted. The underlying breast tissue measures 23 x 13 x 7 cm. Margins are inked blue, and the specimen is serially sectioned.

There is a large, grossly apparent tumor in the upper outer quadrant which is extremely firm, gray-tan, infiltrates into surrounding breast tissue, and measures 2.6 x 2.5 x 1.5 cm. This tumor grossly extends to within 1.3 cm of the deep surgical margin. This lesion will be designated as "lesion #1."

Further sectioning demonstrates a healing biopsy site subjacent to the areola, located at the junction between upper and lower outer quadrants. In this region, the biopsy cavity measures up to 2.3 x 0.3 x 0.2 cm. At the nipple, in the region of retraction, there is firm, white tumor; there is also diffuse firmness about the biopsy cavity suspicious for residual tumor in an area measuring 2.8 cm in greatest dimension. This measures 4.0 cm from the deep margin of resection and is distinctly separate from the previously described lesion. The second area of abnormality shall be designated as "lesion #2."

Further sectioning in the left lower outer quadrant reveals a third nodule; this is firm, gray, infiltrates into surrounding fibrous parenchyma, and measures 1.0 cm in greatest dimension. It measures 3.5 cm from the deep surgical margin, and is distinctly separate from the other two nodules. This shall be designated as "lesion #3."

Sections through the remainder of the breast shows firm fibrous breast parenchyma but no additional discrete masses. Sections are submitted as follows:

A1- nipple and areola and incision site with grossly apparent tumor (lesion #2).
A2-A4- sections of biopsy site with surrounding induration (lesion #2).
A5- tangential sections of margin deep to lesion #2.
A6-A8- sections through lesion #1 (closest approach of tumor to superior margin in A8.).
A9- tumor #1 approaching superior margin, and tangential sections of deep margin.
A10- fibrous parenchyma between tumor number one and two, grossly free of tumor.
A11- random sections, upper inner quadrant.
A12- random sections, upper outer quadrant.
A13-14- small tumor in lower outer quadrant (lesion #3).
A15- additional sections, lower outer quadrant.
A16- lower inner quadrant.

The attached axillary tail measures 12 x 6 x 3 cm. Within this, multiple lymph nodes are identified; at least two nodes appear grossly involved with tumor.

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

A17- single 3 cm lymph node, grossly positive (a portion of this lymph node is submitted to Tissue Bank).
A18- multiple lower level axillary lymph node candidates.
A19- single lower level axillary lymph node, bisected.
A20- single large mid axillary lymph node, bisected.
A21- multiple mid axillary lymph nodes.
A22- distal axillary lymph nodes.

Note: A portion of tumor number one, skin, and grossly positive lymph node tissue have all been submitted to the Tissue Bank. Per the surgeon, ER/PR analyses have already been performed, and therefore no additional tissue is banked for receptor analysis.

B. "Right breast and axillary contents", fresh. Received is a right mastectomy specimen with a 15 x 8.5 cm ellipse of tan skin. The nipple and areola are located relatively centrally and somewhat inferiorly; there is no nipple retraction. There is a healing peri-areolar incision site running from approximately the 10:00 to 1:00 position in the upper outer and portion of upper inner quadrant which measures 4.5 cm in length. There is an elevated brown skin nodule measuring 1.3 x 1.3 x 0.2 cm located at the lateral tip of the skin ellipse, which is grossly consistent with a seborrheic keratosis. No other skin lesions are identified.

The underlying breast tissue measures 20 x 11 x 3 cm. Sectioning through the breast parenchyma after margins are inked reveals dense fibrous parenchyma. In the upper breast, at the junction of upper inner and upper outer quadrant, there is a healing biopsy cavity which measures 3.5 x 3 x 2 cm; this is surrounded by fat necrosis and firm tissue and has a hemorrhagic rim with no definite gross residual tumor. The biopsy changes extend to within 2.5 cm of the deep margin. No masses or other abnormalities are identified.

Block Summary:

B1- sections of seborrheic keratosis.
B2- nipple and areola, and skin with healing biopsy scar.
B3- B5- sections of wall of biopsy cavity.
B6- margins to deep to biopsy site (tangential).
B7- random sections, upper outer quadrant.
B8- random sections, upper inner quadrant.
B9- random sections, lower inner quadrant.
B10-random sections, lower outer quadrant.

There is no definite axillary tail attached to the specimen. There is a strip of fibrofatty tissue measuring 6 x 2 x 1 cm, in which no lymph nodes are grossly identified. Sections of fibrofatty axillary tissue are submitted in Blocks B11 and B12.

MICROSCOPIC EXAMINATION:
Sectoions of lesion #1 of the left breast show infiltrating duct carcinoma. Tumor cells are arranged as tubules and in nests, and infiltrate into surrounding fibrous stroma and fat with accompanying desmoplastic response. There is a moderate degree of nuclear pleomorphism. Focally, comedo and cribriform intraductal carcinoma is present in association with this mass (A7), although this intraductal component is minor.

Sections of lesion #2 of the left breast show tumor which predominantly has the appearance of infiltrating lobular carcinoma, with tumor infiltrating in linear "indian file" rows. Nuclei are relatively small and bland. There is extensive infiltration of areolar smooth muscle and fibrous parenchyma, as well as extensive perineural invasion. In several small foci, small tubles of neoplastic cells are present. There are several foci of associated intraductal carcinoma with cancerization of lobules/ lobular carcinoma in situ.

Sections of lesion #3 of the left breast show a lesion with a papillary appearance; in most areas, this appears to be an intraductal process, although

in one area an associated component of invasive duct carcinoma is seen. Papillomas are present in adjacent breast tissue.

DIAGNOSIS:
A. "LEFT BREAST AND AXILLA":

LEFT BREAST WITH THREE SEPARATE FOCI OF BREAST CARCINOMA.

CARCINOMA NUMBER ONE(A1-A3): INFILTRATING DUCT CARCINOMA (UPPER OUTER QUADRANT), 2.6 X 2.5 X 1.5 CM, N.S.A.B.P. NUCLEAR GRADE MODERATELY DIFFERENTIATED, HISTOLOGIC GRADE 2/3.
INTRADUCTAL CARCINOMA COMEDO AND CRIBRIFORM TYPES, COMPRISES LESS THAN 5% OF THE TUMOR.
VASCULAR INVASION IS PRESENT.
DEEP MARGIN FREE OF CARCINOMA.

CARCINOMA NUMBER TWO (A6-8): TUBULOLOBUAR CARCINOMA WITH PREDOMINANTLY LOBULAR FEATURES (SUBAREOLAR REGION AT JUNCTION BETWEEN UPPER AND LOWER OUTER QUADRANTS), IN REGION OF HEALING BIOPSY SITE, 2.8 CM IN GREATEST DIMENSION.
INTRADUCTAL CARCINOMA/ LOBULAR CARCINOMA IN SITU IS PRESENT, COMPRISING LESS THAN 1% OF THE TUMOR.
TUMOR EXTENDS INTO THE LARGE DUCTS AND SOFT TISSUE OF THE NIPPLE.
DEFINITIVE VASCULAR INVASION IS NOT PRESENT.
DEEP MARGIN FREE OF CARCINOMA.

CARCINOMA NUMBER THREE (A13-A14): INFILTRATING DUCT CARCINOMA ARISING IN A REGION OF PAPILLARY INTRADUCTAL CARCINOMA (LOWER OUTER QUADRANT), 1.0 CM IN GREATEST DIMENSION, N.S.A.B.P. NUCLEAR GRADE MODERATELY DIFFERENTIATED, HISTOLOGIC GRADE 2/3.
DEEP MARGIN FREE OF TUMOR.
NO DEFINITE VASCULAR INVASION IDENTIFIED.

REMAINDER OF BREAST WITH MULTIFOCAL INTRADUCTAL CARCINOMA (SOLID AND CRIBRIFORM TYPES) WITH CANCERIZATION OF LOBULES, LOBULAR CARCINOMA IN SITUE, FLORID EPITHELIAL HYPERPLASIA OF USUAL TYPE, INTRADUCTAL PAPILLOMA (A13), APOCRINE METAPLASIA, ADENOSIS, DUCT ECTASIA, AND MICROCYSTS.

TWO OF FIFTEEN LEFT AXILLARY LYMPH NODES INVOLVED WITH METASTATIC CARCINOMA (2/15). (TUBULOLOBULAR PATTERN)

SKIN WITH HEALING WOUND AND NO EVIDENCE OF MALIGNANCY.

B. "RIGHT BREAST AND AXILLARY CONTENTS":

BREAST WITH HEALING BIOPSY SITE WITH FAT NECROSIS, FOREIGN BODY REACTION, AND GRANULATION TISSUE.

MULTIFOCAL INTRADUCTAL CARCINOMA, SOLID TYPE, WITH CANCERIZATION OF LOBULES, INCLUDING REGIONS AROUND BIOPSY CAVITY (B5) AND IN LOWER OUTER QUADRANT (B10).

FOCAL INFILTRATING DUCT CARCINOMA (B2), N.S.A.B.P. NUCLEAR GRADE WELL DIFFERENTIATED, HISTOLOGIC GRADE 1/3.

DEEP MARGIN FREE OF CARCINOMA.

SKIN WITH HEALING WOUND, SEBORRHEIC KERATOSIS, EPIDERMAL INCLUSION CYST, AND NO EVIDENCE OF MALIGNANCY.

REMAINDER OF BREAST WITH FLORID EPITHELIAL HYPERPLASIA OF USUAL TYPE, ADENOSIS, AND APOCRINE METAPLASIA.

NO LYMPH NODES IDENTIFIED IN LIMITED AXILLARY DISSECTION.