

Clinical Diagnosis & History:

Biopsy proven left breast ILC, approximately 3-4 cm in size. Presents for left TM, SLN Biopsy, as well as right TM. Protocol History of right breast MRI guided core biopsy.

Specimens Submitted:

- 1: SP: Sentinel node #1 level one left axilla (fs)
- 2: SP: Sentinel node #2 level one left axilla (fs)
- 3: SP: Sentinel node #3 level one left axilla (fs)
- 4: SP: Right breast
- 5: SP: Left breast
- 6: SP: Additional lymph node, left axilla

DIAGNOSIS:

- 1) SENTINEL LYMPH NODE #1, LEVEL I LEFT AXILLA, EXCISION:
 - ONE BENIGN LYMPH NODE (0/1).
 - ADDITIONAL H/E STAINED SECTIONS AND IMMUNOPEROXIDASE STAINS FOR CYTOKERATINS (AE1:AE3) SHOW NO EVIDENCE OF METASTATIC CARCINOMA.
- 2) SENTINEL LYMPH NODE #2, LEVEL I LEFT AXILLA, EXCISION:
 - ONE BENIGN LYMPH NODE (0/1).
 - ADDITIONAL H/E STAINED SECTIONS AND IMMUNOPEROXIDASE STAINS FOR CYTOKERATINS (AE1:AE3) SHOW NO EVIDENCE OF METASTATIC CARCINOMA.
- 3) SENTINEL LYMPH NODE #3, LEVEL I LEFT AXILLA, EXCISION:
 - METASTATIC CARCINOMA IN THE FORM OF MICROSCOPIC CLUSTERS AND SINGLE CELLS IS IDENTIFIED IN ONE OF ONE LYMPH NODE ON ADDITIONAL CYTOKERATINS IMMUNOHISTOCHEMICAL STAINS (AE1:AE3). EACH CLUSTER OF CARCINOMA MEASURES LESS THAN 0.2 MM, BUT SEVERAL CLUSTERS ARE PRESENT DISPERSED THROUGHOUT THE LYMPH NODE, ADDING UP TO ABOUT 300-400 CELLS IN TOTAL. RARE TUMOR CLUSTERS ARE ALSO IDENTIFIED ON ADDITIONAL H/E STAINED SECTIONS.
- 4) BREAST, RIGHT TOTAL MASTECTOMY:
 - BENIGN BREAST TISSUE WITH FOCAL ATYPICAL DUCTAL HYPERPLASIA (ADH), COLUMNAR CELLS, FIBROADENOMATOID CHANGES AND BIOPSY SITE.
 - CALCIFICATIONS ARE ASSOCIATED WITH ADH AND BENIGN EPITHELIUM.
 - BENIGN SKIN AND NIPPLE.
- 5) BREAST, LEFT, TOTAL MASTECTOMY:

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ICD-0-3

Carcinoma, infiltrating lobular 8520/

Site: breast, NOS C50.9

2/16/11

bw

UWID:15FB8C8D-85EF-458E-8065-9F4E922D457E
TCGA-AO-A1KO-01A-PR
Redacted



Criteria	Yes	No
Diagnosis Discrepancy		
Primary Tumor Site Discrepancy		
IPAA Discrepancy		
Prior Malignancy History		
Dual/Synchronous Primary Malignancy		
Case is (circle):	QUALIFIED	DISQUALIFIED
Reviewer Initials	Date reviewed: 2/16/11	

- INVASIVE LOBULAR CARCINOMA, CLASSICAL TYPE, PRESENT AS MULTIPLE FOCI DISTRIBUTED OVER AN AREA SPANNING ABOUT 6 CM GROSSLY.
- EXTENSIVE LOBULAR CARCINOMA IN SITU (LCIS) IS ALSO IDENTIFIED, CLASSICAL TYPE (TYPE A).
- THE INVASIVE CARCINOMA IS LOCATED IN THE UPPER OUTER QUADRANT AND LOWER OUTER QUADRANT.
- NO INVOLVEMENT OF THE NIPPLE BY EITHER IN SITU OR INVASIVE CARCINOMA IS IDENTIFIED.
- CALCIFICATIONS ARE PRESENT IN THE IN SITU AND INVASIVE CARCINOMA, AND IN BENIGN BREAST PARENCHYMA.
- NO VASCULAR INVASION IS NOTED.
- NO PERINEURAL INVASION IS IDENTIFIED IN A SECTION IMMUNOSTAINED FOR CYTOKERATIN AE1:AE3.
- INVASIVE CARCINOMA IS 0.6 CM FROM THE NEAREST (DEEP) MARGIN.
- NO SKIN INVOLVEMENT BY CARCINOMA IS IDENTIFIED.
- THE SKIN SHOWS SCAR.
- THE NON-NEOPLASTIC BREAST TISSUE SHOWS BIOPSY SITE, FIBROADENOMATOID CHANGES AND APOCRINE METAPLASIA.

IMMUNOHISTOCHEMICAL STAINS WERE PERFORMED ON FORMALIN-FIXED TISSUE WITH THE FOLLOWING RESULTS FOR INVASIVE CARCINOMA (BLOCK 5-5):

ESTROGEN RECEPTOR (6F11, VENTANA): 95% NUCLEAR STAINING WITH STRONG INTENSITY
 PROGESTERONE RECEPTOR (1E2; VENTANA): 90% NUCLEAR STAINING WITH STRONG INTENSITY
 HER2 (HERCEPT; DAKO): NEGATIVE (0)

CONTROLS ARE SATISFACTORY.

Comment: HerceptTest™ (Dako) is an FDA-approved method for assessment of HER2 protein overexpression in breast cancer tissue routinely processed for histological evaluation. The HER2 test results are reported in accordance with the ASCO/CAP guideline recommendations for HER2 testing in breast cancer (J Clin Oncol 2007; 25(1):118-145). Some of the immunohistochemistry and ISH tests were developed and their performance characteristics were determined by the Department of Pathology. They have not been cleared or approved by the US Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. These tests are used for clinical purposes. They should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) as qualified to perform high complexity clinical laboratory testing.

- 6) LYMPH NODE, LEFT AXILLA, EXCISION:
 - ONE BENIGN LYMPH NODE (0/1).

I ATTEST THAT THE ABOVE DIAGNOSIS IS BASED UPON MY PERSONAL EXAMINATION OF THE SLIDES (AND/OR OTHER MATERIAL), AND THAT I HAVE REVIEWED AND APPROVED THIS REPORT.

*** Report Electronically Signed Out ***

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1). The specimen is received fresh for frozen section consultation, labeled "sentinel node #1, level 1, left axilla" and consists of a pink tan firm lymph node measuring 1.8 x 0.6 x 0.4 cm. The specimen is bisected and entirely submitted for frozen section.

Summary of sections:

FSC -- frozen section control

2). The specimen is received fresh for frozen section consultation, labeled "sentinel node #2, level 1, left axilla" and consists of a pink tan firm lymph node measuring 2.8 x 1.5 x 0.4 cm. The specimen is bisected and entirely submitted for frozen section.

Summary of sections:

FSC -- frozen section control

3). The specimen is received fresh for frozen section consultation, labeled "sentinel node #3, level 1, left axilla" and consists of two pink tan firm lymph nodes measuring 1.2 x 1.2 x 0.6 cm and 0.8 x 0.8 x 0.4 cm. The specimen is bisected and entirely submitted for frozen section.

Summary of sections:

FSC -- frozen section control

4). The specimen is received fresh labeled, "Right breast stitch marks axillary tail" and consists of a breast measuring 19 x 18 x 3.5 cm with overlying skin ellipse measuring 9.5 x 3.5 cm. Situated centrally on the skin surface is an everted nipple measuring 1.7 x 1.5 x 0.3 cm and areola measuring 3.7 x 3.4 cm. No visible scar is identified on the skin surface.

A suture demarcates the axillary aspect. The posterior surface of the breast is inked black, the anterior surface is inked blue and the specimen is serially sectioned to reveal a dark red well circumscribed biopsy cavity filled with red hemorrhagic material measuring 2.5 x 2 x 2 cm, and located in the midline of the lower quadrants and 0.6 cm from the deep margin. A clip is not identified in the specimen. Sectioning of the axillary aspect reveals no grossly identifiable lymph nodes. Representative sections are submitted. Sample of all quadrants were given to TPS protocol.

Summary of sections:

N - nipple

NB - nipple base

S - skin scar

D - deep margin

** Continued on next page **

BX - biopsy site
 UIQ - upper inner quadrant
 LIQ - lower inner quadrant
 UOQ - upper outer quadrant
 LOQ - lower outer quadrant

5). The specimen is received fresh labeled, "left breast" and consists of a breast measuring 23 x 19 x 2 cm with overlying skin ellipse measuring 9 x 4 cm. Situated center on the skin surface is a nipple measuring 1.5 x 1.2 cm and areola measuring 3.2 x 3.2 cm. The skin shows a linear scar measuring 3 cm, situated lateral to the nipple. A suture demarcates the axillary aspect. The posterior surface of the breast is inked black, the anterior blue and the axillary aspect is inked yellow. The specimen is serially sectioned to reveal a tan white firm stellate tumor mass measuring 6 x 3.5 x 2.0 cm, located in LOQ 0.5 cm from the deep margin, extending to the overlying skin. A clip is not identified. Sectioning of the axillary aspect reveals no grossly identifiable lymph nodes. Representative sections are submitted.

Summary of sections:

N - nipple
 NB - nipple base
 S - skin scar
 D - deep margin
 BX - biopsy site
 T - tumor
 UIQ - upper inner quadrant
 LIQ - lower inner quadrant
 UOQ - upper outer quadrant
 LOQ - lower outer quadrant

6). The specimen is received in formalin, labeled "additional lymph nodes left axilla" and consists of irregular yellow tan lobulated tissue measuring 0.8 x 0.3 x 0.3 cm. The specimen is entirely submitted.

Summary of sections:

LN- lymph nodes

Summary of Sections:

Part 1: SP: Sentinel node #1 level one left axilla (fs)

Block	Sect.	Site	PCs
1		FSC	1

Part 2: SP: Sentinel node #2 level one left axilla (fs)

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Block	Sect. Site	PCs
1	FSC	1

Part 3: SP: Sentinel node #3 level one left axilla (fs)

Block	Sect. Site	PCs
1	FSC	1

Part 4: SP: Right breast (

Block	Sect. Site	PCs
4	BK	4
1	D	1
2	LIQ	2
2	LOQ	2
1	N	1
1	NB	1
1	S	1
2	UIQ	2
2	UOQ	2

Part 5: SP: Left breast

Block	Sect. Site	PCs
2	2	2
1	BK	1
2	D	2
2	LIQ	2
2	LOQ	2
1	N	1
1	NB	1
1	S	1
5	T	5
2	UOQ	2

Part 6: SP: Additional lymph node, left axilla (

Block	Sect. Site	PCs
1	LN	1

Procedures/Addenda:
Addendum

Status: Signed Out
By:

Date Completed
Date Reported

Addendum Diagnosis

ADDENDUM

PART #5
LEFT BREAST:

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INVASIVE LOBULAR CARCINOMA IS PRESENT IN TEN OUT OF NINETEEN SLIDES, and involves upper outer and lower outer quadrants. A microscopic focus of invasive lobular carcinoma is also present in a section from the lower inner quadrant (<1mm). THE SIZE OF THE INVASIVE TUMOR IS DIFFICULT TO ASSESS IN THIS CASE, AS INVASIVE CARCINOMA IS PRESENT AS MULTIPLE NODULES, MANY OF WHICH MERGE INTO ONE ANOTHER. THE LARGEST CONTIGUOUS SPAN OF INVASIVE CARCINOMA MEASURES AT LEAST 2.0 CM MICROSCOPICALLY IN SLIDE 5-10. IN THIS SLIDE THE TUMOR IS PERIPHERALLY TRANSECTED ALONG A BROAD FRONT.

Intraoperative Consultation:

Note: The diagnoses given in this section pertain only to the tissue sample examined at the time of the intraoperative consultation.

- 1) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #1 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SAME
- 2) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #2 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SAME
- 3) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #3 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SEE FINAL

Note: The diagnoses given in this section pertain only to the tissue sample examined at the time of the intraoperative consultation.

- 1) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #1 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SAME
- 2) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #2 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SAME
- 3) FROZEN SECTION DIAGNOSIS: SP: Sentinel node #3 level one left axilla
(fs) : Benign
PERMANENT DIAGNOSIS: SEE FINAL

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