

FINAL PATHOLOGIC DIAGNOSIS

ICD-O-3
Carcinoma, infiltrating
ductal 8500/3
Site: @ Breast NOS
C50.9
JW 2/18/13

A. Right axillary sentinel lymph node #1, biopsy:

- Metastatic ductal carcinoma (1.3cm) involving single lymph node (1/1)

B. Right axillary sentinel lymph node #2, biopsy:

- One lymph node, no tumor (0/1)

C. Right axillary sentinel lymph node #3, biopsy:

- One lymph node, no tumor (0/1)

D. Right axillary non sentinel lymph node, biopsy:

- One lymph node, no tumor (0/1)

E. Right breast, wire-guided lumpectomy:

- Invasive ductal carcinoma, SBR III, multiple foci (largest 1.3cm)
- Ductal carcinoma in situ high grade, solid, cribriform and micropapillary types with central necrosis and associated calcifications; DCIS spans entire specimen (8cm in greatest dimension)

F. Right breast, new inferior lateral margin, excision:

- Ductal carcinoma in situ, intermediate grade, microscopic foci (largest 5mm)
- Microscopic foci (each 1mm) of DCIS present at outer medial aspect of specimen

G. Right breast, new outer lateral margin, excision:

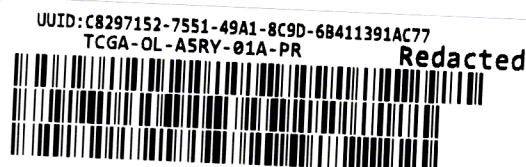
- Ductal carcinoma in situ, rare microscopic foci (largest 1mm)
- DCIS >1cm from nearest new margin

Breast Pathologic Parameters

1. Invasive carcinoma:

A. Microscopic measurement: Multifocal; largest focus (measures 1.3cm)

B. Composite histologic (modified SBR) grade: III (largest focus)



- Architecture: 2

- Nuclear grade: 3

- Mitotic count: 3

C. Associated intraductal carcinoma in situ (DCIS):

- High grade, solid, cribriform and micropapillary types

- DCIS involves entire specimen and spans 8cm in greatest dimension

2. Excisional biopsy margins: Positive

- DCIS present at medial margin, <1mm from anterior, posterior, lateral, superior, and inferior margins (tumor approaches margins at multiple foci throughout specimen)

- Invasive carcinoma at inferior and 1mm from posterior margin; additional margins greater than 2mm away

3. Blood vessel and lymphatic invasion: Present in breast parenchyma

4. Axillary lymph nodes: Positive (1/4)

- Size of largest metastatic deposit: 13 mm

- Extranodal extension: absent

5. Special studies

- ER: Weak expression in 10% of invasive tumor nuclei

- PR: No expression

- Her2/neu antigen (FISH): Amplified (ratio: 7.6)

6. pTNM (AJCC, 7th edition, 2010): pT1c(m), N1(sn), MX

Effective _____ is Checklist utilizes the 7th edition TNM staging system for breast of the American Joint Committee on Cancer (AJCC) and the International Union Against Cancer (UICC).

has1

Interpretation performed by the Attending Pathologist and reviewed with the

Resident/Fellow

Electronically Signed Out by

Clinical History:

Patient is a -year-old female with right breast IDC undergoing lumpectomy and sentinel lymph node biopsy.

Specimens Received:

A: Sentinel lymph node #1

B: Sentinel lymph node #2

C: Sentinel lymph node #3

D: Non-sentinel lymph node

E: Right wire-guided lumpectomy

F: Right breast new inferior lateral margin

G: New outer lateral margin

Gross Description:

The specimens are received in seven containers each labeled with the patient's name and medical record number.

A. The first container is additionally identified as, 'sentinel lymph node #1'.

Received fresh and placed in formalin the specimen consists of a 1.5 x 1 x 1 cm lymph node which is serially sectioned and entirely submitted in cassette A1.

B. The second container is additionally identified as, 'sentinel lymph node #2'. Received fresh and placed in formalin the specimen consists of a 1 x 0.5 x 0.3 cm lymph node which is bisected and is entirely submitted in cassettes B1.

C. The third container is additionally identified as, 'sentinel lymph node #3'. Received fresh and placed in formalin the specimen consists of a 0.7 x 0.3 x 0.3 cm lymph node which is entirely submitted in cassette C1.

D. The fourth container is additionally identified as, 'non-sentinel lymph node'. Received fresh and placed in formalin the specimen consists of a 0.5 x 0.3 x 0.3 cm lymph node which is entirely submitted in cassette D1.

E. The fifth container is additionally identified as, 'right wire guided lumpectomy'. Received fresh on a radiographic grid is a 102 gm lumpectomy specimen measuring 8 cm from medial to lateral, and 8 in cm from superior to inferior and 3 cm from anterior to posterior. The specimen is oriented with a short suture designating the superior pole and a long suture designating the

lateral pole. There is a wire entering the antero-lateral aspect of the specimen through grid coordinate E5. Accompanying the specimen is an x-ray demonstrating a metallic clip located in grid coordinate E3. There is a circled mass in grid positions C3, C4, D3, D4, centered on the clip. The wire enters the specimen in grid coordinates E5 terminates in E3. 2 other areas of calcifications are circled in grid coordinates D6 (#2) and F4-F5 (#3).

The margins are inked as follows:

anterior - black;

posterior - red;

superior - blue;

inferior - green;

medial - yellow;

lateral - violet.

The specimen is serially sectioned from medial to lateral into 8 slices. The area of calcifications noted in grid D6 begins in the slides #2 and extends laterally the tumor the main to mass and measures 3 x 2 x 1.5 cm. is found in the slices #2 and 3 adjacent to the red and green ink. The main mass, which is irregular and firm, is present in slices #5 to #7 and measures 3.5 x 2.5 x 2 cm. It is present adjacent to red ink and is 1 cm from black ink, 3 cm from green ink, 1.5 cm away from blue ink. The area of calcification noted in grid F4 and F5 is present in the slices numbers 7 and activated ink measuring 1.5 x 1.1 x 1 cm and is continuous with the main mass. The metallic clip is identified in slice 6. The wire enters the specimen in slice 5 and terminates in slice 5. The remainder of the breast parenchyma is white-yellow and lobulated with no additional masses or lesions.

Entire mass including both calcified area was has a largest dimension of 5 cm.

Specimen is submitted in toto.

Block summary:

E1-E4: medial margin, slice 1

E5-E9: slice 2, area of calcification

E10-E23: slice 3, area of calcification

E24-E31: slice 4

E32-E44 ; slice 5

E45-E62: slice 6, clip in E49-E50

E63-E78: slice 7

E79-E86: lateral margin, slice 8

F. The sixth container is additionally identified as, 'right breast, new inferior lateral margin'. Received fresh on the radiographic grid is a 13.5 gm, 6.5 x 4 x 1.2 cm medial inferior lateral margin which is oriented as follows:

- new outer lateral margin is marked with a long black stitch (violet)
- new outer medial margin is designated with a short black stitch (yellow)
- new outer anterior margin is designated with a short blue stitch (black)
- new outer posterior margin is designated with a long blue stitch. (red)

Inner cauterized margin is inked green. An area of calcification is noted on the accompanying x-ray in grid D4-D5-E5. Specimen is a serially sectioned from

lateral to medial in to 14 slices. An area of calcification is present in slice #6 and measures 1 x 0.5 x 0.3 cm. No other lesions are identified. The specimen is entirely submitted from lateral to medial.

F1: slice 1-3

F2: slice 4-5

F3: slice 6

F4: slice 7

F5-F6: slice 8

F7: slice 9

F8: slice 10

F9: slice 11

F10: slice 12

F11: slice 13-14

G. The seventh container is additionally identified as, 'new outer lateral margin'. Received fresh on a radiographic grid is a 20 gm, 8 x 3.5 x 1 cm new outer lateral margin. Specimen is oriented as follows

- new outer superior is designated with a short black stitch (blue)
- new outer inferior is designated with a long black a stitch (green)
- new outer anterior is designated with a short blue stitch (black)
- new outer posterior is designated with a long blue stitch (red)

Inner cauterized margin is inked violet. Specimen is serially sectioned from lateral to medial into 14 slices and does not contain any distinct masses or

lesions. Specimen is submitted in toto in cassettes G1-14.

Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Noted		✓
Case is (circle): QUALIFIED / DISQUALIFIED		
Reviewer: [Signature]		Date Reviewed: 2/10/13