Sample

Caremorra, injetrating duct NOS 8500/3 Sate B Breast NOS C 50.9

Surgical Pathology Report

FINAL PATHOLOGIC DIAGNOSIS

A. Right axillary sentinel node #1, biopsy:

- One lymph node, negative for metastatic carcinoma (0/1). (H&E and cytokeratin AE1/AE3)

B. Right axillary sentinel node #2, biopsy:

- One lymph node, negative for metastatic carcinoma (0/1). (H&E and cytokeratin

AE1/AE3)

C. Superior mastectomy flap, excision:

- Benign fibroadipose tissue with focal fat necrosis.

D. Right breast, simple mastectomy:

- Two foci of invasive ductal carcinoma, SBR Grade II, see breast pathologic parameter.

- Ductal carcinoma in-situ, intermediate nuclear grade, solid and apocrine types.

- Microscopic focus of atypical ductal hyperplasia.

- Previous biopsy sites identified.

- Margins of excision are negative for invasive and in-situ carcinoma.

- Intraductal papilloma (9 mm) with extensive hyalinization, see comment.

- Hyalinized 6 mm nodule with osseous metaplasia.

- Columnar cell change.

- Fibroadenomatous changes.

- Apocrine metaplasia.

- Sclerosing adenosis.

- Duct ectasia.

E. Inferior flap, right breast excision:

- Benign fibroadipose tissue with microscopic focus of breast parenchyma, distant from

the new true margin.

F. Medial flap, right breast excision:

- Benign fibroadipose tissue.

Breast Pathologic Parameters

1a. Invasive carcinoma: (1 o'clock lesion)

A. Gross measurement: 2.1 x 1.9 cm

B. Composite histologic (modified SBR) grade: II

- Architecture: 3

- Nuclear grade: 2
- Mitotic rate: 1

C. Associated intraductal carcinoma in situ (DCIS):

- Within main mass (forming less than 5% of tumor volume)

1b. Invasive carcinoma (12 o'clock lesion): 0.9 x 0.8 cm

Composite histologic (modified SBR) grade II

- Architecture: 3
- Nuclear grade: 2
- Mitotic rate: 1

Associated intraductal carcinoma in situ (DCIS): None

- 2. Intraductal carcinoma:
- A. Microscopic measurement: Admixed with 1 o'clock lesion
- B. Type: Solid, Apocrine
- C. Nuclear grade: Intermediate
- D. Associated features: None
- 3. Excisional biopsy margins: Free of tumor
- DCIS more than 10 mm from anterior-superior (closest) margin
- Invasive carcinoma more than 5 mm from anterior-superior (closest) margin
- 4. Blood vessel and lymphatic invasion: Suspicious
- 5. Nipple: unremarkable
- 6. Skin: uninvolved
- 7. Skeletal muscle: absent
- 8. Axillary lymph nodes: Negative (0/2)
- 9. Special studies (ER, PR repeated on mastectomy):

1 o'clock lesion

- ER: No expression, 0% of invasive tumor nuclei
- PR: No expression, 0% of invasive tumor nuclei
- HER2 antigen (FISH) (biopsy Not amplified (ratio:

1.14)

- Ki-67 (Performed on previous biopsy : 35%

Special studies (ER, PR repeated on mastectomy):

12 o'clock lesion

- ER: No expression, 0% of invasive tumor nuclei
- PR: No expression, 0% of invasive tumor nuclei
- HER2 antigen (FISH)(biopsy : Not amplified (ratio: 1.13)
- Ki-67 (Performed on previous biopsy): 30%

10. pTNM (AJCC, 7th edition, 2010): pT2(m), N0(sn), MX

Effective this 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).

Clinical History:

The patient is a year-old female with multicentric right breast invasive

ductal carcinoma undergoing simple mastectomy and sentinel node biopsies.

mammogram showed a hypoechoic mass at 1:00 in the right breast, 4 cm from the nipple, measuring 20 mm in maximum diameter. A smaller round hypoechoic mass measuring 8 mm in maximum diameter was additionally identified at 12:00 in the right breast, 4 cm from the nipple. Clips were placed in the central aspect of both lesions.

Comment

D. Immunohistochemical stains for cytokeratin 5/14 were performed on block D7 and support intraductal hyperplasia, usual type. Immunohistochemical stains for p63 and mycin heavy chain were performed on D10 and support an intraductal papilloma. All immunohistochemical controls were appropriate.

Specimens Received:

A: Right axillary sentinal node #1 B: Right axillary sentinal node #2

C: Superior mastectomy flap

D: Right breast

E: Inferior flap right breast F: Medial flap right breast

Gross Description:

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

A. The first container is additionally identified as, 'right axillary sentinel node #1'. Received fresh for intraoperative consultation is a portion of rubbery yellow-tan tissue measuring 2.5 x 2.3 x 0.8 cm. The specimen is bisected and entirely frozen, and the frozen section diagnosis by Dr. is 'no tumor'. The frozen section remnants are entirely submitted in A1 FS and A2 FS.

B. The second container is additionally identified as, 'right axillary sentinel node #2'. Received fresh for intraoperative consultation is a portion of yellow-tan and blue-tinged tissue measuring $1.5 \times 1.0 \times 0.8$ cm. The specimen is bisected and entirely frozen, and the frozen section diagnosis by Dr. is 'no tumor'. The frozen section remnant is entirely submitted in B1 FS.

C. The third container is additionally identified as, 'superior mastectomy flap'. Received fresh and placed in formalin is a 26.5 gram, 10.3 x 4 x 0.9 cm portion of lobulated yellow fibroadipose tissue. There is a stitch on one aspect of the specimen designating the final anterior margin. The aspect of the specimen with the stitch is inked black. The specimen is serially sectioned to reveal grossly unremarkable lobulated yellow fibroadipose tissue. Representative sections are submitted in C1-C5.

D. The fourth container is additionally identified as, 'right breast'. Received fresh and placed in formalin is a 593.6 g simple mastectomy specimen. The specimen is oriented with a double short suture designating the superior aspect and a double long suture designating the lateral aspect. The breast measures 24.5 cm from medial to lateral, 18 cm from superior to inferior, and 3.5 cm from anterior to posterior. On the anterior surface is a 21.5 x 13.5 cm brown ellipse of skin with a 5.5 x 3.8 cm areola and a 1.2 x 1.1 x 0.5 cm raised nipple. The nipple-areolar complex reveals no evidence of ulceration or retraction.

The specimen is inked as follows: anterior-superior - blue; anterior-inferior - green; posterior - black.

The specimen is serially sectioned from medial to lateral into 20 slices (slice 1 = medial, nipple in slice 10) to reveal a well-circumscribed lobulated tan mass measuring 2.1 x 1.9 x 1.5 cm in the superior aspect of slices 7 and 8. The mass is 1.3 cm from the posterior (black) margin, 1.3 cm from the anterior superior (blue) margin, and 0.9 cm from the anterior skin. In slice 8, 1.8 cm superior to the first mass, is a 0.9 x 0.8 x 0.8 cm rubbery mass that is located 1 cm from the posterior (black) margin and 0.8 cm from the anterior superior (blue) margin. A clip is identified in slice 8 within the second mass. There are 2 additional nodular areas in the breast. The first measures 0.9 x 0.8 x 0.7 cm and is located in the inferior aspect of slice 11, 1.6 cm from the posterior (black) margin. The second nodular area measures 0.5 x 0.4 x 0.4 cm and is found in the inferior aspect of slice 15, 1 cm from the posterior (black) margin. The remainder of the specimen consists of approximately 25% dense gray-white fibrous breast parenchyma and 75% lobulatedyellow adipose tissue. No additional masses or nodules are grossly identified.

Block summary:

D1: mass #1, slice 7

D2: mass #1, slice 7, including deep margin

D3: mass #1, slice 8, including closest to anterior superior margin

D4: masses #1 and #2, slice 8

D5-D6: mass #2, slice 8, including closest to anterior superior and deep margins (submitted in tandem)

D7: medial to mass #1, slice 6 D8: inferior to mass #1, slice 8 D9: lateral to masses #1 and #2, slice 9

D10: nodular area #1, slice 11

D11: breast parenchyma between nodular areas #1 and #2, slice 13

D12: nodular area #2, slice 15

D13: lateral to nodular area #2, slice 16

D14: upper-outer quadrant slice 14

D15: lower-outer quadrant slice 14

D16: upper-inner quadrant slice 4

D17: lower-inner quadrant slice 5

D18: nipple

D19: skin, slice 8

E. The fifth container is additionally identified as, 'inferior flap right breast stitch marks final anterior margin'. Received fresh and placed in formalin is a 6.5 g, 4.7 x 3.2 x 0.6 cm portion of lobulated yellow fibroadipose tissue. On one aspect of the specimen is a stitch designating the final anterior margin. The aspect of the specimen with the stitch is inked black. The specimen is serially sectioned to reveal grossly unremarkable lobulated yellow fibroadipose tissue. Representative sections are submitted in E1-E5.

F. The sixth container is additionally identified as, 'medial flap right breast stitch marks final anterior margin'. Received fresh and placed in formalin is a $3.5 \, \mathrm{g}$, $4.7 \, \mathrm{x} \, 1.4 \, \mathrm{x} \, 0.7 \, \mathrm{cm}$ portion of lobulated yellow fibroadipose tissue. There is a stitch on one aspect of the specimen designating the final anterior margin. The aspect of the specimen with the stitch is inked black. The specimen is serially sectioned to reveal grossly unremarkable lobulated yellow fibroadipose tissue. The specimen is entirely submitted in F1-F4.

Tissue fixed for at least 6 hours in 10% NBF and no more than 72 hours.

MD, PhD

Intraoperative Consult Diagnosis: A1 FS and A2 FS: 'no tumor', by Dr.

B1 FS: 'no tumor', by Dr.

