FINAL PATHOLOGIC DIAGNOSIS

Carcinoma, Infiltrating ductal NOS 85013

A. Right breast; modified radical mastectomy:

- Invasive ductal (tubulo-lobular) carcinoma, SBR grade II, focally associated

Site BBreast NOS C50.9 Ociated PNJ 2/18/13

with microcalcification, see parameters.

- Ductal carcinoma in situ, low and intermediate nuclear grade, cribriform, micropapillary and solid type, associated with necrosis and microcalcifications.

- Ductal carcinoma in situ is < 2 mm from posterior margin.
- Biopsy site changes.
- Columnar cell changes.
- Two small fibroadenomas.



- Twenty of twenty-nine lymph nodes, positive for metastatic carcinoma (20/29).
- Extranodal extension present.

Breast Pathologic Parameters

1. Invasive carcinoma:

A. Gross measurement: 4.5 cm (main lesion) and 1 cm (satellite in upper outer quadrant)

B. Composite histologic (modified SBR) grade: II

- Architecture: 2

- Nuclear grade: 2

- Mitotic count: 2

C. Associated intraductal carcinoma in situ (DCIS):

- Within main mass (forming 40 % of tumor volume)

- 2. Intraductal carcinoma:
- A. Gross measurement: 4.5 cm, admixed with invasive carcinoma
- B. Type: Cribriform / Solid / Micropapillary
- C. Nuclear grade: Low / Intermediate
- D. Associated features: Necrosis / Microcalcifications / Cancerization of

lobules

- 3. Excisional biopsy margins:
- DCIS < 2 mm from posterior (closest) margin
- Invasive carcinoma > 4 mm from posterior (closest) margin
- 4. Blood vessel and lymphatic invasion: Present
- Present in breast parenchyma
- Present in axillary tissue
- 5. Nipple: DCIS extending into lactiferous duct
- 6. Skin: uninvolved
- 7. Skeletal muscle: absent
- 8. Axillary lymph nodes: Positive (20/29)
- Size of largest metastatic deposit: 12 mm
- Extranodal extension: present (7 mm; largest focus)
- Tumor deposits in axillary tissue (up to 5 mm)

- 9. Special studies (see
- ER: Strong expression in >90 % of invasive tumor nuclei
- PR: Strong expression in >90 % of invasive tumor nuclei
- Her2/neu antigen (FISH): Non-amplified (ratio:1.00)
- 10. pTNM (AJCC, 7th edition, 2010): pT2(m), N3, MX

Clinical History:

The patient is a year old female, with a right breast mass (MRI: $1.3 \times 0.9 \times 0.8$ cm) and biopsy diagnosis of invasive ductal carcinoma undergoing right modified radical mastectomy.

Specimens Received:

A: Right breast; mastectomy

Gross Description:

A. The specimen is received in a single container labeled with the patient's name, medical record number, and additionally identified as, 'right breast'.

Received fresh and placed in formalin is a 653 gm modified radical mastectomy specimen. The specimen is oriented with a short suture designating the superior margin and a long suture designating lateral margin. The specimen measures 18.5 cm from superior to inferior, 22.5 cm from medial to lateral, and 3.9 cm from anterior to posterior. There is an attached $9.6 \times 7.9 \times 1.5$ cm axillary tail.

On the anterior surface is a 18.0×8.0 cm tannish brown ellipse of skin with a 4.0×4.5 cm areola and a $1.5 \times 1.4 \times 0.5$ cm raised nipple. The nipple-areolar complex reveals no evidence of ulceration or retraction.

The specimen is inked as follows:

superior edge - blue;

inferior edge - green;

posterior - black.

The specimen is serially sectioned from medial to lateral into 11 slices to reveal a rubbery, irregularly shaped, white-tan, 4.5 x 3.5 x 2.5 cm mass with a granular cut surface in slices 3 through 5. A clip is identified in slice 3. The mass is 0.5 cm from the posterior margin and widely free (>2 cm) from the anterior superior and anterior inferiormargins. The remainder of the specimen consists of approximately 30% dense gray-white fibrous breast parenchyma and 70% lobulated yellow adipose tissue. No additional masses or nodules are grossly identified. Sectioning through the axillary tail reveals multiple tan-brown, rubbery lymph nodes ranging from 0.3-2.5 cm in greatest dimension.

Block summary:

A1: mass surrounding clip and closest approach to posterior margin and surrounding clip, slice 3

A2: mass, slice 4

A3: mass, slice 4

A4: mass, slice 5

A5: mass and biopsy site, slice 5

A6: upper outer quadrant, slice 7

A7: lower outer quadrant, slice 6

A8: upper inter quadrant, slice 2

A9: lower-inner quadrant, slice 5

A10: skin adjacent to mass

A11: nipple

A12: tissue directly beneath nipple

A13: one lymph node, sectioned

A14: one lymph node, bisected

A15: one lymph node, sectioned

A16: one lymph node, bisected

A17: one lymph node, bisected

A18: one lymph node, bisected

A19: two lymph nodes

A20: two lymph nodes

A21: three lymph nodes

A22: three lymph nodes

A23: one lymph node, sectioned

A24: three lymph nodes

A25: four lymph nodes

A26: three lymph nodes

