FINAL PATHOLOGIC DIAGNOSIS

- A. Right breast implant:
- Breast implant, gross examination only.
- B. Right skin sparing mastectomy:
- Invasive ductal carcinoma, SBR grade I with satellite lesion, see parameters.
- Ductal carcinoma in-situ, intermediate nuclear grade, solid and cribriform type, with necrosis.
- Intraductal papilloma with intraductal hyperplasia, usual type.
- Columnar cell changes.
- Apocrine metaplasia.
- Intraductal hyperplasia, usual type.
- Duct ectasia.
- Fibroadenoma.
- Focal lactational changes.
- Fragments of implant capsule.
- C. Right breast, submuscular capsule:
- No tumor present.
- Fibrovascular tissue with hyalinization and reactive change consistent with breast implant capsule.

Breast Pathologic Parameters

- 1. Invasive carcinoma:
- A. Gross measurement: 2.0 cm index lesion and 0.7 cm satellite lesion (located 2 cm superior from index mass).

ICD-0-3 Carcinoma, ductal NOS 8500/3 Site B Breast NOS C50.9 960/2/18/13



B. Composite histologic (modified SBR) grade: I - Architecture: 1 - Nuclear grade: 3 - Mitotic count: 1 C. Associated intraductal carcinoma in situ (DCIS): - Within main mass (forming 50% of tumor volume) - Extending away from main mass 2. Intraductal carcinoma: A. Microscopic measurement: Approximately 4.7 cm (main mass extending to satellite lesion) B. Type: Cribriform, solid C. Nuclear grade: Intermediate D. Associated features: Necrosis, cancerization of lobules 3. Excisional biopsy margins: Free of tumor - DCIS > 3 mm from posterior (closest) margin - Invasive carcinoma > 10 mm from posterior (closest) margin 4. Blood vessel and lymphatic invasion: Not identified 5. Nipple: Unremarkable 6. Skin: Uninvolved 7. Skeletal muscle: Uninvolved (attached small fragment) 8. Axillary lymph nodes: Negative (0/4) 9. Special studies - 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: 1.0)

10. pTNM (AJCC, 7th edition, 2010): pT1c(m), N0, MX

Clinical History:

The patient is a vear-old female with invasive ductal carcinoma, grade 1 undergoing right skin sparing mastectomy.

Specimens Received:

A: Right breast implant

B: Right skin sparing mastectomy

C: Right breast submuscular capsule

Gross Description:

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

A. The first container is additionally identified as, 'right breast implant'.

Received is a 12.9 x 12.0 x 0.5 cm deflated breast implant with inscription

with $0.9 \times 1.5 \times 0.5$ cm portion of white soft tissue.

Gross photographs are taken. The specimen is for gross only.

B. The second container is additionally identified as, 'right skin sparing mastectomy'. Received fresh and placed in formalin is a 724 gm simple skin sparing mastectomy specimen. The specimen is oriented with a double short suture designating the superior aspect, a double long suture designating the lateral aspect, a single short suture designating the medial aspect, and a single long suture on the nipple margin. The specimen measures 21 cm from medial to lateral, 18.5 cm from superior to inferior, and 4 cm from anterior to posterior. An L-shaped piece of skin consists of a brown areola measuring 4.1 cm in diameter with an adjacent piece of brown skin extending laterally measuring 6.5 x 3.5 cm, and an adjacent piece of brown skin extending inferiorly from the areola measuring 6.1 x 3.0 cm. In the center of the areola is a retracted nipple measuring 0.8 cm in diameter. There is a 4x5 cm area of white smooth and glistening membranous area on the posterior surface consistent with implant capsule.

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

The specimen is serially sectioned from medial to lateral into 16 slices to reveal a white, firm, $2.0 \times 1.9 \times 1.9 \text{ cm}$ mass in slices 9. A clip is identified in slice 9. The mass is 2.5 cm from the posterior margin (black ink) and 1.5 cm from the inferior anterior margin (green ink). There is a 1 cm white firm area (abutting the posterior margin) just superior to the index lesion.

There is a $0.7 \times 0.7 \times 0.6$ cm ill-defined white firm area identified in slice 8. This lesion is 2.6 cm from the posterior margin, more than 2 cm away from all other margins and 2.0 cm superior to the index lesion.

The remainder of the specimen consists of approximately extending onto 45 % dense gray-white fibrous breast parenchyma and 55 % lobulated yellow adipose tissue. No additional masses or nodules are grossly identified.

Block summary:

B1: Nipple, serially sectioned

B2: Areola

B3: Closest margins to index lesion

B4-5: Index mass, slice 9

B6: Index mass, slice 9, with the white firm area

B7-12: White firm area, slice 8, entirely submitted

B13-14: Lower inner quadrant, slice 2 and 4

B15-16: Upper inner quadrant, slice 1 and 3

B17-18: Lower outer quadrant, slice 7 and 10

B19-20 Upper outer quadrant, slice 7 and 11

C. The third container is additionally identified as, 'right breast submuscular capsule'. Received fresh is a $14.5 \times 1.0 \times 0.3$ cm portion of white and glistening membranous tissue. A representative section is submitted as C1.

