Penrose-St. Francis Health Services

2222 N. Nevada Ave, Colorado Springs, CO 80907

Pathology Department

Report Verified: 09/21/2025 05:54:15 AM

Patient Name: Jane A. Doe

DOB: 1976-03-15 Gender: Female Medical Record #: MRN1234567

Physician: Dr. Sarah Miller

Specimen #: S24-12345

Procedure: Core Biopsy, Right Breast Mass

Collection Date: 2024-05-20
Received Date: 2024-05-21

Preoperative Diagnosis

Right breast mass, suspicious for malignancy.

Postoperative Diagnosis

Invasive Ductal Carcinoma, Not Otherwise Specified (NOS), Right Breast.

Clinical Information

48-year-old female with palpable right breast mass, suspicious imaging findings (BI-RADS 4c).

Gross Description

Received are three tan-white, cylindrical tissue cores, measuring 1.5 cm, 1.8 cm, and 1.7 cm in greatest dimension, collectively submitted in formalin.

Microscopic Description

Sections show fragments of breast tissue extensively infiltrated by malignant epithelial cells forming nests, cords, and individual cells within a desmoplastic stromal background. The tumor cells are pleomorphic with irregular nuclear contours, vesicular chromatin, prominent nucleoli, and moderate amounts of eosinophilic cytoplasm. Mitotic activity is readily identified. No definitive lymphovascular invasion is seen in these biopsy fragments. Ductal carcinoma in situ (DCIS) is identified focally adjacent to the invasive component.

Laboratory Studies

Immunohistochemical stains performed on representative tumor tissue show: ER: Positive (90% of cells, strong intensity), PR: Positive (70% of cells, moderate intensity), HER2: Negative (score 1+ by IHC). Ki-67: Approximately 25%.

Diagnosis

Right Breast, Core Biopsy: Invasive Ductal Carcinoma, Not Otherwise Specified (NOS), Grade 2 (Nottingham Histologic Grade 2/3, based on nuclear pleomorphism 2, tubule formation 2, mitotic count 2). Focally associated Ductal Carcinoma In Situ, intermediate nuclear grade. No lymphovascular invasion identified in the submitted biopsy fragments.

Prognostic/Predictive Markers

Estrogen Receptor (ER): Positive (90%, strong). Progesterone Receptor (PR): Positive (70%, moderate). HER2/neu: Negative (1+). Ki-67 proliferative index: ~25%.

Comment

Further workup with definitive surgical excision is recommended for complete assessment of tumor size, extent, margins, and lymph node status.

Pathologist: Dr. Emily R. Carter, Staff Pathologist

Report Date: 2024-05-23