

AJCC Staging Moments

AJCC TNM Staging 8th Edition

Breast Case #1



AJCC

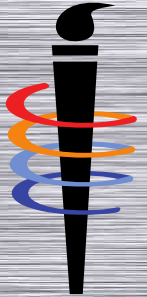
American Joint Committee on Cancer

Validating science. Improving patient care.

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Breast Case # 1

Presentation of New Case

- Newly diagnosed breast cancer patient
- Presentation at Cancer Conference for treatment recommendations and clinical staging



Breast Case # 1

History & Physical

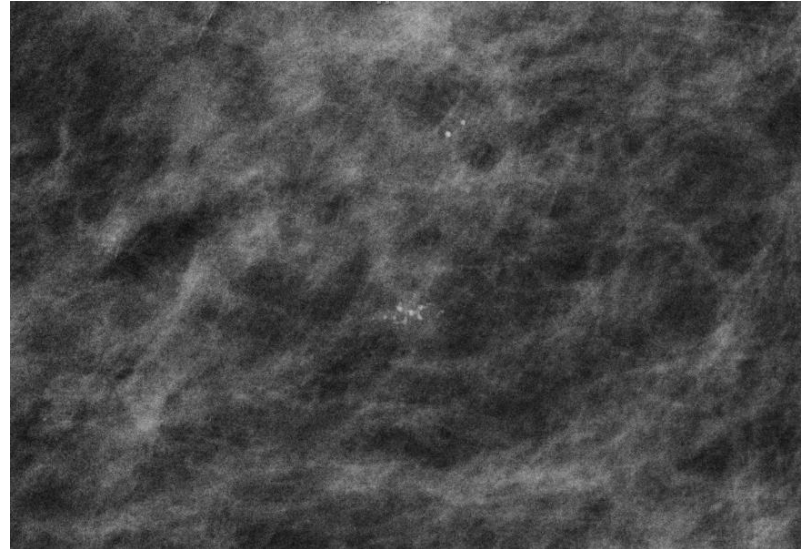
- 85 yr old female who presented with an abnormal screening mammogram, no palpable breast masses, axillary nodes not palpable
- No family hx, no HRT (hormone replacement therapy)



Breast Case # 1

Imaging Results

- Mammogram-0.5cm area of microcalcifications in central left breast mid depth
- Suspicious by magnification and spot compression views
- Stereotactic core needle biopsy recommended
- No further imaging performed



ML view: magnification mammogram

Used with permission. Washington
University School of Medicine



Breast Case # 1

Diagnostic Procedure

- Procedure
 - Stereotactic core needle biopsy central left breast
- Pathology
 - Ductal carcinoma in situ, cribriform and solid type
 - G2, intermediate nuclear grade
 - Estrogen receptor positive
 - Progesterone receptor positive
 - HER2 negative



Breast Case # 1

Clinical Staging

- Clinical staging
 - Uses information from the physical exam, imaging, and diagnostic biopsy
- Purpose
 - Select appropriate treatment
 - Estimate prognosis



Breast Case # 1

Clinical Staging

- Synopsis: elderly patient with 0.5cm DCIS lesion only visible on imaging, axilla is neg on exam and imaging
- What is the clinical stage?
 - T_____
 - N_____
 - M_____
 - Grade_____
 - HER2_____
 - ER_____
 - PR_____
 - Stage Group_____



Breast Case # 1

Clinical Staging

- Clinical Stage correct answer
 - cTis (DCIS)
 - cN0
 - cM0
 - Grade 2 (DCIS nuclear grade)
 - HER2 negative
 - ER positive
 - PR positive
 - Stage Group 0
- Based on stage, treatment is selected
- Review treatment guidelines for this stage



Breast Case #1

Clinical Staging

- Rationale for staging choices
 - cTis (DCIS) for ductal in situ disease
 - cN0 for negative nodes on exam and imaging
 - cM0 nothing to suggest distant metastases
 - G2 nuclear grade used for in situ ca
 - Grade, HER2, ER & PR do not play a role in assigning stage group



Breast Case # 1

Treatment Options

- Review treatment guidelines for this stage
- Discuss appropriate treatment plans for this patient



Breast Case # 1

Surgery & Findings

- Procedure
 - Image-guided wire localized left partial mastectomy (lumpectomy)
 - No lymph nodes excised
- Findings
 - Specimen radiograph reveals microcalcifications and clip in center of specimen
- Final pathology deferred to permanent pathology



Breast Case # 1

Pathology Results

- DCIS, cribriform and solid type, nuclear grade 2
- Invasive ductal carcinoma – 1mm
- Invasive cancer Nottingham Grade 1
- Margins of resection free – closest margins inferior at 5mm
- HER2 negative



Breast Case # 1

Pathological Staging

- Pathological staging
 - Uses information from clinical staging, operative findings, and resected specimen pathology report
- Purpose
 - Additional precise data for estimating prognosis
 - Calculating end results (survival data)



Breast Case # 1

Pathological Staging

- Synopsis: patient with 0.5cm DCIS and a 1mm infiltrating duct ca, no nodes removed
- What is the pathological stage?
 - T_____
 - N_____
 - M_____
 - Grade_____
 - HER2_____
 - ER_____
 - PR_____
 - Stage Group_____



Breast Case # 1

Pathological Staging

- Pathological Stage correct answer
 - pT1mi
 - pNX
 - cM0
 - Grade 1
 - HER2 negative
 - ER positive
 - PR positive
 - Stage Group unknown
- Based on pathologic stage, there is more information to estimate prognosis and adjuvant treatment is selected



Breast Case # 1

Pathological Staging

- Rationale for staging choices
 - pT1mi is microinvasion ≤ 1 mm in size
 - pNX because sentinel or axillary nodes were not removed, pathological staging cannot be completed
 - cM0 - use clinical M with pathological staging unless there is microscopic confirmation of distant metastases
 - Grade 1 for invasive cancer using Nottingham
 - HER2 negative
 - ER positive
 - PR positive



Prognostic Factors/Registry Data Collection

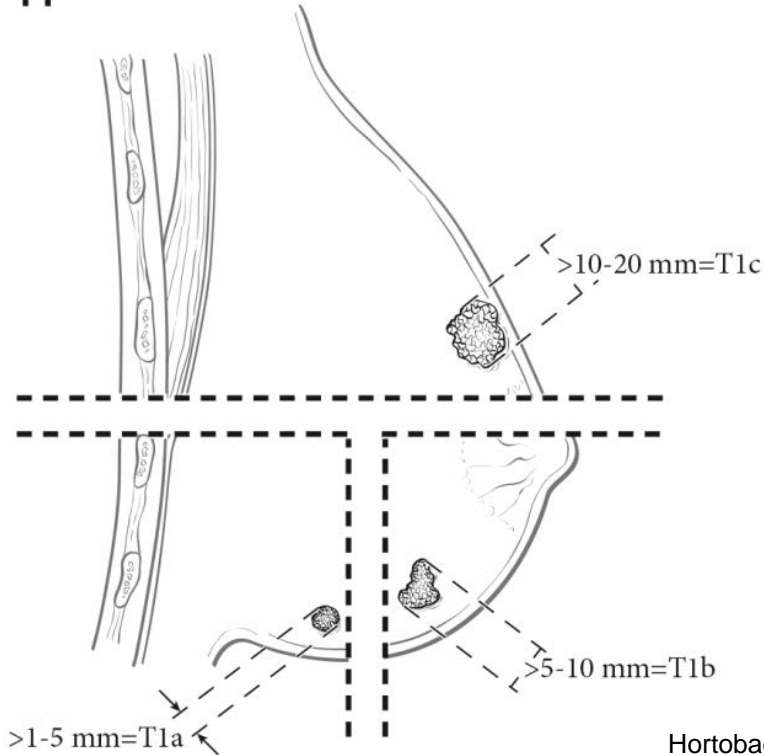
- Applicable to this case
 - Estrogen receptor: percent positive, Allred score
 - Progesterone receptor: percent positive, Allred score
 - HER2: IHC and FISH results
 - Ki67:



T1mi

tumor 1 mm or less in greatest dimension

T1



T1 is defined as a tumor 20 mm or less in greatest dimension

T1mi is a tumor 1 mm or less in greatest diameter (not illustrated)

T1a is defined as tumor more than 1 mm but not more than 5 mm in greatest dimension

T1b is defined as tumor more than 5 mm but not more than 10 mm in greatest dimension

T1c is defined as tumor more than 10 mm but not more than 20 mm in greatest dimension

Hortobagyi, Connolly, et al. Breast. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017



Breast Case # 1

Recap of Staging

- Summary of correct answers
 - Clinical stage cTis cN0 cM0 Gr 2 HER2- ER+ PR+ Stage Group 0
 - Pathological stage pT1mi pNX cM0 HER2- ER+ PR+ Stage Group unknown
- The staging classifications have a different purpose and therefore can be different. Do not go back and change the clinical staging based on pathological staging information.



Staging Moments Summary

- Review site-specific information if needed
- Clinical Staging
 - Based on information before treatment
 - Used to select treatment options
- Pathological Staging
 - Based on clinical data PLUS operative findings and resected specimen pathology report
 - Used to evaluate end-results (survival)

