Seventh Edition Staging 2017

Breast

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Overview

• Provide key information for breast on
  – Common staging issues and questions
  – Exceptions and cautions for T, N, M
  – Diagnostic procedures vs. treatment
  – Treatment satisfying stage classification criteria
  – Blank vs. X
Learning Objectives

• Analyze common staging issues and questions
• Determine exceptions and cautions for T, N, M
• Distinguish diagnostic procedures vs. treatment
• Identify treatment satisfying stage classification criteria
• Recognize difference between blank vs. X

Breast Staging

Clinical T Category

• Determining size for T category
  – Most accurate size needed
  – Don’t just choose largest
  – Review physical exam, mammogram, and ultrasound
  – Physician statement
• Multiple simultaneous ipsilateral tumors
  – T category based on largest of multiple tumors
  – Must use (m) suffix
• Skin dimpling or nipple retraction not used for staging
### Clinical T Category

- **Chest wall structures**
  - Ribs
  - Intercostal and serratus anterior muscles

- **Skin involvement**
  - Ulceration
  - Satellite nodules
  - Edema or peau d’orange not meeting inflammatory criteria

- **Inflammatory carcinoma**
  - Diffuse erythema and edema (peau d’orange) in 1/3+ of skin
  - Clinical diagnosis, microscopic evidence not required
  - Rare, progresses quickly within days/weeks

### Clinical N and M Categories

- **Important to note physical exam and imaging for nodes**
  - Negative exam or imaging
  - Clinically detected on imaging or physical exam
    - Nodes fixed
    - No description implies movable
    - Level of nodes involved

- **M category assessment**
  - Based on physical exam signs or symptoms of mets
  - Imaging is not required
  - Assign cM0 or cM1 based on physical exam or imaging
  - Assign pM1 based on FNA or biopsy of involved metastatic site

### Pathologic T Category

- **Size for T category**
  - Nearest mm used, tenths of mm rounded to assign T
  - Do not add core biopsies to residual tumor in resection
  - May need to use either core biopsy or resection to assign T

- **Complex shapes may represent one tumor**
  - Macroscopically distinct tumors that are very close together
  - May find microscopic subtle areas of continuity between foci
  - Need contiguous uniform tumor density in intervening tissue
  - Does not apply to macroscopic tumor with microscopic satellites
  - Determined by pathologic and imaging findings
  - Need physician and pathologist statements

- **Multiple simultaneous ipsilateral tumors**
  - T category based on largest of multiple tumors
  - Must use (m) suffix
Pathologic N Category

- **pN category**
  - Must have microscopic assessment of at least 1 node to assign
  - Microscopic assessment includes
    - FNA or core needle biopsy
    - Sentinel node procedure
    - Axillary node dissection
  - Include nodes not microscopically confirmed to assign pN
  - No microscopic assessment is pNX

- **Isolated tumor cells (ITC) is pN0(i+)**
  - Not greater than 0.2mm

- **Micrometastasis is pN1mi**
  - Greater than 0.2mm but none greater than 2.0mm

Pathologic N and M Categories

- **Metastasis in lymph node**
  - At least one metastasis greater than 2.0mm
  - Applies to all pN subcategories except pN1mi

- **M category assessment**
  - Based on physical exam signs or symptoms of mets
  - Imaging is not required
  - Assign cM0 or cM1 based on physical exam or imaging
  - Assign pM1 based on FNA or biopsy of involved metastatic site
  - Assign cM0(i+) for CTC or DTC

- **M category for postneoadjuvant therapy staging (yp)**
  - Same as M category assigned for clinical stage
  - If M1 before Rx, M1 for yp stage even if mets no longer detected
  - Progression: distant mets identified after Rx when preRx eval neg

Criteria for Clinical Classification

- **Patient undergoing diagnostic workup**
  - Exam of breast, skin, and lymph nodes
  - Imaging of breast: mammogram, ultrasound, MR
  - Diagnostic FNA, core needle biopsy, or surgical biopsy of breast
  - Diagnostic FNA or sentinel biopsy of nodes
  - Diagnostic FNA or biopsy of metastatic sites
  - Imaging of other sites, see NCCN or radiology guidelines

- **Incidental finding during excision benign tumor**
  - Start of diagnostic workup for malignant tumor
  - Not considered treatment for malignant tumor
## Diagnostic vs. Treatment

<table>
<thead>
<tr>
<th>Diagnostic procedures</th>
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<tbody>
<tr>
<td>Sampling of breast tumor</td>
</tr>
<tr>
<td>Not intended to remove entire tumor</td>
</tr>
<tr>
<td>Not known if entire tumor is removed at this point</td>
</tr>
<tr>
<td>Do NOT change staging based on subsequent info</td>
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<table>
<thead>
<tr>
<th>Surgical treatment of primary site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resection of breast tumor</td>
</tr>
<tr>
<td>Margin status does not determine whether considered resection</td>
</tr>
<tr>
<td>Margin status may necessitate re-excision</td>
</tr>
<tr>
<td>20% of lumpectomies have re-excision</td>
</tr>
<tr>
<td>If nodal dissection not done, still considered treatment</td>
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</table>

## Treatment Satisfying Stage Classification

<table>
<thead>
<tr>
<th>Pathologic staging</th>
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<tbody>
<tr>
<td>Excision of tumor</td>
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<tr>
<td>Intent is treatment, not sampling</td>
</tr>
<tr>
<td>Usually no macroscopic tumor left behind</td>
</tr>
<tr>
<td>Re-excision for margin involvement, both surgeries are treatment</td>
</tr>
<tr>
<td>Nodal dissection not required to qualify for staging</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Postneoadjuvant therapy staging</th>
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<tbody>
<tr>
<td>Must meet standard guidelines, such as NCCN or ASCO</td>
</tr>
<tr>
<td>Usually 4-6 cycles of chemo, sometimes more</td>
</tr>
<tr>
<td>Usually 4-6 months of endocrine therapy, may be up to 1 year</td>
</tr>
<tr>
<td>Short course endocrine therapy does NOT qualify</td>
</tr>
<tr>
<td>Rule for staging, not for registry treatment data items</td>
</tr>
</tbody>
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## Blank vs. X

<table>
<thead>
<tr>
<th>Tell patient's story through staging</th>
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<tbody>
<tr>
<td>Clinical staging – story of pt's diagnosis and workup</td>
</tr>
<tr>
<td>ctTX = physician did not examine patient, no mammogram/US</td>
</tr>
<tr>
<td>ct blank = registrar had no access to information</td>
</tr>
<tr>
<td>ct blank = no workup for pt, incidental finding at surgical treatment</td>
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</table>

<table>
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<tr>
<th>Pathologic staging – pt's story through surgical treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ptTX = someone lost specimen between OR and path dept</td>
</tr>
<tr>
<td>pt blank = pt didn't have surgical treatment</td>
</tr>
<tr>
<td>pt blank = registrar had no access to information</td>
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Case Scenario

Diagnostic Workup

- **History/chief complaint**
  - 57 year old female with abnormal mammogram

- **Physical exam**
  - No breast mass, skin changes, or nipple discharge

- **Imaging**
  - Mammogram: microcalcifications UOQ rt breast

- **Procedure**
  - Core needle biopsy UOQ rt breast

- **Pathology report**
  - Ductal carcinoma in situ, no invasive carcinoma identified

Clinical Staging Information

- **Physical exam**
  - No mass detected in breast
  - Axilla exam:
    - Did physician not mention, which implies nodes not involved
    - Did registrar fail to document axilla exam

- **Imaging**
  - Microcalcifications does not provide staging information

- **Procedure**
  - No staging information

- **Pathology report**
  - In situ carcinoma
Clinical Staging Answer & Rationale

- **pTis**
  - In situ carcinoma identified, no invasive ca
  - AJCC rules state pTis for clinical T category
    - Must have microscopic evidence, cannot diagnose in situ on imaging

- **cN0**
  - No axillary involvement
  - Standard for in situ tumors

- **cM0**
  - No signs or symptoms of mets

- **Stage 0**

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Treatment

- **History & physical**
  - 55 year old female noted lump in right breast

- **Operative report**
  - Right modified radical mastectomy
  - Sentinel nodes and completion axillary dissection

- **Pathology report**
  - Breast tumors’ size and location
    - 1.1cm UOQ, 1.1cm subareolar, 1.2cm subareolar, 0.9cm LOQ
    - Infiltrating ductal and mucinous carcinoma
    - Mets in 2/2 sentinel nodes
    - Mets in 3/13 axillary nodes

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Pathologic Staging Information

- **Surgery**
  - Patient had surgical resection qualifying for pathologic staging

- **Clinical staging information**
  - Bx: pTis, physical exam: large mass encompassing 1/3 breast
  - Axillary and supraclavicular nodes negative on physical exam
  - No signs or symptoms of mets

- **Operative report**
  - No additional information

- **Pathology report**
  - Infiltrating ductal and mucinous carcinoma
  - Four tumors, largest 1.2cm
  - Involvement 2/2 sentinel and 3/13 axillary nodes
### Pathologic Staging Answer & Rationale

- **pT1c(m)**
  - Largest invasive tumor >10mm but < 20mm
  - In situ on bx with large mass in breast
  - (m) for multiple synchronous tumors

- **pN2a**
  - 5 axillary nodes involved
  - Presume >2mm since not stated as micromets

- **cM0**
  - No signs or symptoms of mets

- **Stage IIIA**

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### Information and Questions on AJCC Staging

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### Stage Classifications

<table>
<thead>
<tr>
<th>Clinical - c</th>
<th>Diagnostic Workup - imaging, bx</th>
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<tbody>
<tr>
<td>Pathologic - p</td>
<td>Surgical Treatment</td>
</tr>
<tr>
<td>Pathology Report</td>
<td>Pathology Report</td>
</tr>
<tr>
<td>Evaluation by imaging &amp; physical exam</td>
<td>Surgical Treatment</td>
</tr>
<tr>
<td>Posttherapy - yc</td>
<td>Posttherapy - yp</td>
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CAnswer Forum

• Submit questions to AJCC Forum
  – Located within CAnswer Forum
  – Provides information for all
  – Allows tracking for educational purposes

• http://cancerbulletin.facs.org/forums/

Summary

• Employ critical thinking to understand disease site
  – Analyze common staging issues affecting stage assignment
  – Determine exceptions and cautions for T, N, M
  – Utilize guidelines available to registrars

• Tell patient’s story through accurate staging
  – Utilize correct stage classifications
  – Distinguish diagnostic procedures vs. treatment
  – Identify treatment satisfying stage classification criteria
  – Recognize difference in story between blank vs. X

• Identify resources for AJCC staging

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