Overview

• Continues instructions for learning AJCC staging
  – Progress with the rules
    • Correct classifications
    • Assigning T, N, and M categories
    • Assigning stage group
  – Cover rules for exceptions and unique complex cases on these topics
  – Encompassing some nuances for these topics
  – Provide final piece of staging rules
Learning Objectives

• Demonstrate correct usage of classifications
• Employ principles of assigning T, N, and M categories
• Distinguish choices for assigning stage group
• Illustrate critical thinking skills in applying AJCC rules
• Utilize additional materials
• Evaluate self-guided learning through webinar and quiz

Quiz

Lesson 22
Classifications
Clinic

• Biopsy shows highest category
  – Performed during clinical staging time frame

• Highest category information used twice
  – Info MAY be used for pathologic classification
    • Needs to meet other stage group rules
    • p designation
  – Info also still USED for clinical classification
    • c designation

Pathologic

• Pathologic staging includes
  – Physical exam and imaging
  – Even though not tissue proven
  – If not overruled in pathology report, but not limited to path report

• Pathologic staging depends on
  – Proven extent of disease, so if
  – Unreasonable to or cannot remove primary tumor then
  – Pathologic staging criteria met without primary removal if
    • Microscopic confirmation of highest T and highest N or
    • Microscopic confirmation of M1
    • Note microscopic confirmation may be from biopsy only

Postneoadjuvant Therapy

• Carefully define neoadjuvant therapy

• Not all drugs given prior to surgery are neoadjuvant
  – Drugs given for other reasons
    • Treating symptoms, not treating cancer

• Example – prostate cancer
  – No neoadjuvant therapy exists outside of clinical trials
    • Clinical trials
    • For very specific high risk scenarios
    • 6 months of neoadjuvant therapy

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Retreatment

- Used for retreatment
  - Cancer that was never disease free (not a recurrence)
  - Cancer progression
  - Further treatment needs to be planned
  - Retreatment staging
    - Aids in selecting treatment plan
    - Most treatment guidelines based on AJCC staging

Autopsy

- Cannot use autopsy classification if
  - Any indication of cancer prior to death
  - Includes clinical suspicion
  - Even if not proven

Lesson 23
T Category
Metrachronous Primary

- Metachronous primary tumors in single organ
  - Are second or subsequent primary cancers
  - Staged independently

- y prefix
  - Not used for these cases
  - Unusual case where treatment of 2nd cancer warrants this use
    - Physician judgment call

Highest T Category

- If diagnostic biopsy proves highest T category
  - Clinical staging
    - Used to assign cT
  - Pathologic staging
    - May also be used to assign pT
    - Rationale: resection will not provide info to change T
  - Additional requirements to assign pathologic stage
    - Surgical node dissection
    - Biopsy of highest N category

- If requirements not met
  - Do NOT record pT in registry database
  - Data fields for assigning stage, not for data collection

Info Overrides Pathology Report pT

- Information can override pathology report pT
  - Clinical stage information
    - Physical exam
    - Imaging
    - Example for thyroid
      - Physical exam: subcutaneous soft tissues involved, voice hoarseness indicating laryngeal or recurrent laryngeal nerve involvement, T4a
      - Imaging: subcutaneous soft tissue & trachea involved, T4a
      - Path report: resection, involvement of perithyroid soft tissues, T3
      - Assign pT4a

  - Operative findings during resection
    - Surgeon’s observations
    - Example for colon
      - Operative findings: extended into retroperitoneum, not biopsied, T4b
      - Path report: subserosal fat, radial margin involved, T3
      - Assign pT4b
**y for T Category**

- **y** prefix for postneoadjuvant therapy T category
  - T uses same categories as for clinical and pathologic staging

- **ycT**
  - Used for clinical stage after neoadjuvant therapy
  - Registries do not have data field

- **ypT**
  - Used for pathologic stage after surgical resection following neoadjuvant therapy
  - Registries document in pathologic data field and must use descriptor data field to indicate "y"

**X and Blank for T Category**

- **X and Blank needed**
  - Accommodate variability in cancer behavior and type of workup

- **X**
  - Information is unknown to physicians, cannot be assessed
  - Diagnostic workup did not provide info needed to assess and assign T category
  - Example: colonoscopy for colon cancer
  - Surgical resection but specimen not processed – unusual for T

- **Blank**
  - Patient did not meet staging criteria
  - No diagnostic workup for clinical stage
  - Example: emergency surgery for bowel obstruction finds colon ca
  - No surgical resection for pathologic stage

**Lesson 24**

**N Category**
Module IV Lessons

**pT Necessary to Assign pN**

- Pathologic assessment of primary tumor (pT)
  - Generally necessary to assign pathologic assessment of nodes (pN)
- pN exception
  - Excision of nodes is pN when
  - No resection of primary site
  - Due to unknown primary, assigned T0 (no evidence of primary tumor)
    - *Remember: AJCC physician definition of unknown primary, not registry definition*
- When pathologic T (pT) is available
  - Any microscopic exam of nodes is pN

**Highest N Category**

- If diagnostic or sentinel biopsy proves highest N category
- Diagnostic biopsy of nodes
  - Used to assign cN for clinical staging
  - *May also be used to assign pN for pathologic staging*
- Microscopic exam of node in highest N category
  - Assigned as pN
  - Even in absence of pathologic information on other nodes
- Microscopic confirmation of highest N category
  - *May be pN*
  - Regardless of whether T is pT or cT
  - Caution:
    - cT referring to tumor that cannot be removed
    - Must be in conjunction with other rules such as
    - Microscopic confirmation of highest T, usually not be of primary site

**Info Overrides Pathology Report pN**

- Information can override pathology report pN
- Clinical stage information
  - Physical exam
    - Imaging
      - Example for breast
      - Physical exam: ipsilateral supraventricular nodes involved, N3c
      - Imaging: ipsilateral internal mammary/infraclavicular nodes involved, N3c
      - Path report: resection, mets in 6 axillary nodes, pN2a
        - Assign pN3
  - Operative findings during resection
    - Surgeon’s observations
      - Example for esophagus
      - Operative findings: 10-12 regional nodes involved, N3
      - Path report: mets in 4 regional nodes, pN3
        - Assign pN3

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y for N Category

- y prefix for postneoadjuvant therapy N category
  - N uses same categories as for clinical and pathologic staging

- ycN
  - Used for clinical stage after neoadjuvant therapy
  - Registries do not have data field

- ypN
  - Used for pathologic stage after surgical resection following neoadjuvant therapy
  - Registries document in pathologic data field and MUST use descriptor data field to indicate “y”

X and Blank for N Category

- X and Blank needed
  - Accommodate variability in cancer behavior and type of workup

- X
  - Information is unknown to physicians, cannot be assessed
  - Diagnostic workup did not provide info needed to assess and assign N category
    - Example: colonoscopy for colon cancer, no scans
  - Surgical resection primary but no nodes examined
    - Example: meets pathologic staging criteria but no nodes removed

- Blank
  - Patient did not meet staging criteria
  - No diagnostic workup for clinical stage
  - No surgical resection primary for pathologic stage
    - Example: diagnostic node biopsy not recorded in pN

Lesson 25
M Category
pM1 Meets Pathologic Stage Criteria

- Metastasis confirmed microscopically (pM1)
  - Criteria for pathologic classification is satisfied
  - Without surgical resection of primary tumor
  - Does not require resection of metastatic tumor
  - Assign pathologic stage using pM1

pM1 Diagnostic Biopsy

- Diagnostic biopsy proven distant metastasis is pM1
  - Grouped as both clinical and pathologic stage IV
  - Regardless of "c" or "p" status of T and N
  - Examples
    - cT1 cN1 pM1 clinical stage IV
    - cT1 cN1 pM1 pathologic stage IV
    - pT1 pN1 pM1 pathologic stage IV

Two Sites for M Subcategory

- M subcategory distinguishes between
  - One site, e.g. pM1a
  - Two or more sites, more than one site, e.g. pM1b

- Only one site must be microscopically proven for pM1b
  - Two metastatic sites criteria to assign pM1b subcategory
  - Do NOT need microscopic evidence of both sites to assign
  - Example
    - Biopsy of liver and bone scan both indicating metastatic disease
    - Assign pM1b subcategory to indicate two sites involved

- Since at least one metastatic site has been tissue proven
  - Not necessary to biopsy other site
  - Already proven cancer has metastasized
  - Clarification from AJCC physician experts
No y for M Category

- M category never uses y prefix for postneoadjuvant therapy
  - Do NOT use ycM
  - Do NOT use ypM
  - Use cM0, cM1, or pM1

- M category status defined prior to therapy
  - Never changes from original designation
  - Always use M category from clinical stage
  - Reflects patient's true prognosis and risk of recurrence/progression
  - Example:
    - Clinical stage: cT3 cN2 cM1
    - yPathologic stage: ypT1 ypN0 cM1 regardless of current M status

Blank Only – No X for M Category

- Blank needed, X NOT used
  - Accommodate variability in cancer behavior and type of workup
  - Information must be known, judgment call, X is not valid

- Blank – physician staging
  - Patient did not meet staging criteria
    - No diagnostic workup for clinical stage
    - Example: emergency surgery for bowel obstruction finds colon ca
  - No surgical resection for pathologic stage

- Blank – registry data fields
  - Must be used when not correct M designation for stage group
    - Must use data fields to indicate cM or pM assigned
    - Relevant to appropriate clinical or pathologic classifications
    - Appropriate if not used in clinical or pathologic classification
      - cM blank if diagnostic biopsy is positive
      - pM blank if no microscopic confirmation of mets

Lesson 26
Stage Group
Any T and Any N in Stage Groups

- Any T
  - Includes all T categories except Tis
- Any N
  - Includes all N categories
- Commonly used in stage groups to simplify tables
  - Extra lines not needed to list all T or N categories included
- Indicates either T or N not driving factor in assigning stage
  - Group will remain the same regardless of T or N
  - Group assigned based on other categories

Working Stage

- Working stage **ONLY** for physicians
  - Used as necessary for medical care of patient
- Working stage
  - May combine clinical and pathologic information
  - Used for either clinical or pathologic classification
  - When only partial information is available
- Example: mastectomy in elderly patient, no nodes sampled
  - Inappropriate to subject this patient to risk of node procedure
  - Physician uses clinical N with pT and cM for working stage group
  - Directs further care and provides prognosis for patient
- **NOT** for registrar use, **NOT** for registry data fields

y for Stage Group

- yc stage group assigned, and consists of
  - ycT ycN c/pM
- yp stage group assigned, and consists of
  - ypT ypN c/pM
- yp complete response
  - ypT0 ypN0 cM0
  - NOT stage 0
- cTNM is used for
  - Estimate of disease prior to neoadjuvant therapy
  - Case comparisons and population studies
Blank Only – No X for Stage Group

- Blank needed, X NOT used
  - Accommodate variability in cancer behavior and type of workup
  - X is not a valid stage group
- Blank
  - Patient did not meet staging criteria
  - All categories and stage group are blank
  - No diagnostic workup for clinical stage
  - Example: cancer was incidental finding during surgery
  - No surgical resection for pathologic stage
  - Example: cancer was treated with systemic and/or radiation therapy
  - Example: surgical procedures or some type of resection performed but did not meet pathologic surgical resection criteria in chapter
- Category combinations with incomplete or missing information
  - Information lacking to assign stage group

Lesson 27
Link to “Debunking Urban Legends in Staging” lectures

Link to Additional Material

- Debunking Urban Legends in Staging
  - Series of eight presentations designed for the physician
  - Introduces new 7th edition rules
  - Serves as a reminder of existing rules
  - Includes assigning
    - Classification
    - T, N, and M categories
    - Stage groups
  - Highlights of changes to 7th edition in general
  - Highlights of changes to 7th edition breast, colon, lung and prostate

DEBUNKING URBAN LEGENDS IN STAGING
Summary

• Articulate and recognize AJCC rules and guidelines
• Apply AJCC principles accurately
  – Classifications
  – T, N, and M categories
  – Stage group
• Illustrate critical thinking skills in applying AJCC criteria
• Validate lessons
  – Additional materials
  – Webinar and quiz

Thank you

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