

This webinar is sponsored by

The Centers for Disease Control and Prevention

Supported by the Cooperative Agreement Number DP13-1310


The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Chronic Disease Prevention and Health Promotion
National Program of Cancer Registries



Lesson 21
Module III Recap Webinar with
Quiz from AJCC Needs Assessment

Donna M. Gress, RHIT, CTR




AJCC
American Joint Committee on Cancer
Validating science. Improving patient care.

This presentation was supported by the Cooperative Agreement Number DP13-1310 from The Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of The Centers for Disease Control and Prevention.

Overview

- Continues instructions for learning AJCC staging
 - Proceed with the rules
 - Correct classifications
 - Assigning T, N, and M categories
 - Assigning stage group
 - Cover rules for more complex cases on these topics
 - Encompassing some nuances for these topics
 - Provide foundation for subsequent module
 - Advanced




3 Copyright © 2015, AJCC. All Rights Reserved.

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

4 Copyright © 2015 AJCC. All Rights Reserved



Quiz




**Lesson 15
Classifications**



Clinical

- Surgical exploration during resection
 - NOT used for clinical stage
 - Surgeon always evaluates/explores before performing resection
 - Part of pathologic stage, it is the operative findings
- Extensive imaging **not** needed to assign stage
 - Assign stage based on physician assessment and judgment
 - Recommended workup helpful in determining stage
 - Imaging choices may point to stage
 - Imaging may not be performed
 - Due to low stage and not appropriate, or
 - Comorbidities precluding treatment choices, affecting prognosis
- Guides to accepted standards for diagnostic evaluation
 - American College of Radiology Appropriateness Criteria
 - Practice Guidelines of National Comprehensive Cancer Network


21 Copyright © 2015 AJCC. All Rights Reserved



Pathologic

- Operative findings
 - Can overrule pathology report **IF**
 - Tissue was not submitted to pathology
 - pT does **NOT** have to be tissue proven
- Pathologist cannot assign final pT and pN
 - Provides helpful information, not final categories
 - Cannot provide stage group unless pM1


22 Copyright © 2015 AJCC. All Rights Reserved



Postneoadjuvant Therapy

- ycTNM
 - Used with T and N categories only
 - M category is
 - Defined at the time of diagnostic workup
 - Never changed after neoadjuvant therapy
- yc denotes response
 - After systemic and/or radiation therapy
 - Before surgical resection
 - Clinical information is used
 - Physical exam
 - Imaging
- Registrars **cannot** record
 - No data fields in registry for yc

23 Copyright © 2015 AJCC. All Rights Reserved



Postneoadjuvant Therapy

- ypTNM
 - Used with T and N categories only
 - M category is
 - Defined at the time of diagnostic workup
 - Never changed after neoadjuvant therapy
- yp denotes response that is proven
 - After systemic and/or radiation therapy *and*
 - After surgical resection
 - Surgery and pathology information is used
 - Operative findings
 - Pathology report of surgical resection specimen
- Registrars **must** use AJCC stage descriptor “y” data field
 - Cannot be analyzed with pathologic staged cases

24 Copyright © 2015 AJCC. All Rights Reserved

Retreatment

- Recurrence - apply in cases when
 - Further treatment planned for
 - Cancer that recurs
 - After disease-free interval
- Information obtained from
 - Clinical staging extent of disease
 - Therapeutic procedures (including surgical treatment)
- Information may be prognostic for patients
- Extent of recurrent disease guides therapy for patients
 - Primary treatment
 - Adjuvant therapy

25 Copyright © 2015 AJCC. All Rights Reserved


Retreatment

- Recurrence confirmation
 - Biopsy confirmation is important
 - If clinically feasible
 - Not required
 - May not be appropriate for each category: T, N, and M
 - Clinical evidence may be used as needed for confirmation
 - Clinical exam
 - Imaging
 - Endoscopic procedures
 - Exploratory procedures
 - Other related methods

26 Copyright © 2015 AJCC. All Rights Reserved

Autopsy

- Apply to cases where
 - Cancer **NOT** evident prior to death
 - **NO** suspicion of cancer
 - No signs/symptoms
 - No clinical findings
 - No imaging findings




27 Copyright © 2015 AJCC. All Rights Reserved.

Lesson 16 T Category



T0


- No evidence of primary tumor
- Site of primary tumor is unknown
- T0 assigned in above cases
 - Based on clinical suspicion of primary site
 - Nodes or distant metastasis pathologically c/w primary site
- Examples
 - Axillary nodes c/w ductal ca, no apparent breast tumor
 - T0 N1 M0 stage IIA
 - Lung mass c/w renal cell ca, no apparent kidney tumor
 - T0 N0 M1 stage IV



28 Copyright © 2015 AJCC. All Rights Reserved.

Multiple Tumors


- Synchronous tumors of same histology in **one** organ
 - Simultaneous multiple tumors
 - Assign T by most advanced tumor, highest T category
- Indicate multiplicity
 - (m) suffix, T2(m)
 - (number) suffix, T2(5)
- Example: two T2 and one T3 tumors in one organ
 - Assign T3(m) or T3(3)
- Registries must record (m) in AJCC stage descriptor
 - Data field for AJCC y prefix or m, E, S, suffixes
 - Indicates burden of disease for data analysis



30 Copyright © 2015 AJCC. All Rights Reserved

Multiple Tumors


- Synchronous primary tumors in **paired** organs
 - Simultaneous multiple tumors
 - Stage and report independently
- Example: T2 tumor in lt adrenal, T3 tumor in rt adrenal
 - Report as two cancers
 - Do **NOT** use (m) suffix
 - Report lt adrenal cancer and assign T2
 - Report rt adrenal cancer and assign T3



31 Copyright © 2015 AJCC. All Rights Reserved

Multiple Tumors

- Multiplicity is criterion for T category in following sites
 - Thyroid
 - Assign T1 – T4 and add (s) for solitary or (m) for multifocal
 - Liver
 - T3 and T4 used for multiple tumors
 - Ovary
 - T1b or higher for both ovaries
- Do not use (m) suffix rules for these sites
 - Thyroid is (s) or (m), not just the (m) or (number)
- Do not consider as separate independent primaries



32 Copyright © 2015 AJCC. All Rights Reserved


Lesson 17
N Category



Minimum Number - Sufficient Sampling

- Minimum number
 - Sufficient sampling to identify positive nodes
 - Eliminate false negatives
- Minimum to be examined can apply to
 - Number and
 - Location of nodes
- Requirements
 - Described in site chapters as appropriate
 - Detail common medical practice
- Sentinel nodes
 - If accepted as accurate for defining involvement, and
 - Sentinel node procedure performed
 - Minimum does **NOT** apply


34 Copyright © 2015 AJCC. All Rights Reserved



pN when Minimum Not Met


- Lymph node surgery performed
 - Fewer than ideal minimum number examined
 - N category still generally classified as pN
- pN category assignment
 - Based on information available
 - Number of positive nodes and/or
 - Location of most advanced pathologic node resected
 - Assigned even if minimum number or location criteria not met
- Impact of using pN in this situation
 - Importance of outcomes data analysis
 - Determine accuracy of nodal staging with less than minimum

35 Copyright © 2015 AJCC. All Rights Reserved



Sentinel Node


- Sentinel node designation (sn)
 - Example: pN0(sn), pN1(sn)
 - Used when **only** a sentinel node biopsy is performed
 - **Not** used if further dissection of nodes is performed
- Breast chapter instructions for (sn)
 - Indicates nodal status based on less than axillary dissection
 - Used for sentinel node procedure
 - Used where sentinel & non-sentinel nodes are <6 nodes (less than standard low axillary dissection)
 - Do **NOT** use (sn) when ≥ 6 sentinel nodes removed
- Does **not** apply to registry coding of procedure
 - Instructions only apply to assigning stage



36 Copyright © 2015 AJCC. All Rights Reserved.

Pathologic Node Assessment


- Assigning pN
 - Pathologic primary tumor assessment (pT) is
 - Generally necessary to assign pathologic nodal assessment (pN)
- N categories
 - In conjunction with pT
 - Do **NOT** need pathologic exam of **highest** N category to assign pN
 - Example:
 - Resection/path exam of N1 nodes only
 - No resection/path exam of N2 and N3 nodes
 - Assign pN1
 - Physician determines appropriate nodal resection for patient
 - N category criteria does not dictate nodal exam



37 Copyright © 2015 AJCC. All Rights Reserved.

Isolated Tumor Cells

- ITC
 - Single tumor cells or small clusters of cells
 - Clusters of cells $\leq 0.2\text{mm}$ in greatest dimension
 - Identified by
 - Routine histology or immunohistochemistry (IHC)
 - Nonmorphologic techniques such as flow cytometry or DNA analysis
 - Designated as pN0 (i+)
 - Defined in chapters where this commonly occurs
- Nodes with **only** ITC are assigned pN0
- **Exception:** nodes with **only** ITC are assigned pN1 for
 - Melanoma
 - Merkel Cell




38 Copyright © 2015 AJCC. All Rights Reserved.

Lesson 18
M Category



Isolated Tumor Cells in Metastatic Sites


- Isolated tumor cells in metastatic sites
 - Circulating cells in the blood
 - Micrometastasis ($\leq 0.2\text{mm}$) in bone marrow or nonregional tissue
 - Histologically visible micrometastasis
- Identified by
 - IHC
 - Molecular techniques
- Designated as cM0(i+)
 - Note this is clinical M0 since pM0 does not exist
- Defined in chapters where this commonly occurs
- May be prognostic for recurrence or survival



40 Copyright © 2015 AJCC. All Rights Reserved

CTC and DTC


- Circulating tumor cells – CTC
- CTC are identified in
 - Blood
- Disseminated tumor cells – DTC
- DTC are identified in
 - Distant organs or nonregional tissue
 - Bone Marrow



41 Copyright © 2015 AJCC. All Rights Reserved

M Category for Classification


- Assign appropriate M category for clinical classification
- Clinical stage M category based on assessment method
- Example for colon cancer diagnostic workup
 - CT guided liver biopsy positive for mets
 - CT chest shows lung mets
 - Assign pM1 for clinical stage
 - Do **NOT** record cM1 and pM1 in registry data fields
 - Stage is **NOT** to document all findings
 - Only one M category for each stage
 - AJCC does not have rules to assign cT cN cM pM clinical stage



42 Copyright © 2015 AJCC. All Rights Reserved

M Category for Classification


- Assign appropriate M category for pathologic classification
- Pathologic stage M category based on assessment method
- Example for breast cancer mastectomy
 - CT chest shows lung mets
 - Bone biopsy positive for mets
 - Assign pM1 for pathologic stage
 - Do **NOT** record cM1 and pM1 in registry data fields
 - Stage is **NOT** to document all findings
 - Only one M category for each stage
 - AJCC does not have rules to assign pT pN cM pM pathologic stage



43 Copyright © 2015 AJCC. All Rights Reserved

M Category for Classification

- Do **NOT** use registry M data fields to document test results
 - Difference between coding systems and assigning AJCC stage
- Coding systems
 - All data fields are utilized to document all available information
 - Code every field, none are left blank
- Assigning AJCC stage
 - Only **one** M category assigned for each stage
 - M category assigned independently for each classification
 - Not based on M category used in other classifications
 - Assign M category based on
 - Assessment method
 - For classification time frame




44 Copyright © 2015 AJCC. All Rights Reserved

Lesson 19
Stage Group



M Category for Pathologic Stage


- pM not required to assign pathologic stage group
- Pathologic stage group options with cM
 - pT pN cM0
 - pT pN cM1
- Pure clinical and pure pathologic stage groups
 - Refers to following AJCC rules for that classification
 - Does **NOT** refer to using all “c” or all “p” for each category



46 Copyright © 2015, AJCC. All Rights Reserved.

pM1 Special Rules


- pM1
 - Microscopic confirmation of distant mets during diagnostic workup (clinical stage)
 - Sanctions **both** clinical and pathologic stage group assignment
 - Do not need to meet resection criteria for pathologic stage
- Stage group options – pM1 found during diagnostic workup
 - cT cN pM1 clinical stage IV
 - cT cN pM1 pathologic stage IV



47 Copyright © 2015, AJCC. All Rights Reserved.

In Situ Neoplasm

- CIS definition
 - Has not involved any structures in primary organ that
 - Allows tumor cells to spread to regional nodes or distant sites
- CIS exception to stage group guidelines
 - Clinical stage
 - pTis cN0 cM0 clinical stage 0
 - Pathologic stage
 - pTis cN0 cM0 pathologic stage 0
- Caution for pathologic stage
 - Cannot use CIS rule in isolation
 - Must also meet pathologic stage resection criteria
 - Avoids sampling error when resection might show invasion
 - Example: TURB



48 Copyright © 2015 AJCC. All Rights Reserved.

Lesson 20


Link to AJCC Staging Moments



Link to Additional Material

- AJCC Staging Moments
 - Educational series to promote physician discussion on proper and accurate staging
 - Offers succinct, case-based presentations following common cancer conference format of symptom presentation, imaging work-up, and pathology diagnosis
 - Target difficult and common staging scenarios
 - Clarify finer points of staging
- Staging Moments anatomic sites
 - Breast, colon, lung, head & neck, melanoma
 - 3 cases for each site

STAGING MOMENTS



50 Copyright © 2015 AJCC. All Rights Reserved.



