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Overview

• Provide key information for prostate 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
Prostate Staging
Clinical T Category

• Physical exam and DRE
  – Gold standard for assigning T category
  – **Required** for assigning T category
  – Determine whether tumor inapparent or apparent
  – Apparent tumor
    • Involvement of prostate lobes
    • Extension beyond prostate

• DRE
  – Determines location for biopsy
    • Multiple biopsies for inapparent or some apparent tumors
    • May be targeted to areas of extension beyond prostate
  – Used for staging as prognosis based on **palpable** tumors
    • No list of words that mean palpable
    • Determine by description, physician notes
  – Small inapparent tumors found on biopsy do not affect prognosis
Clinical T Category

• Biopsy reports **not** used to assign cT
  – Confirms presence of cancer
  – Does not determine T category

• Biopsies of extraprostatic tissue
  – Still need DRE information for staging
  – DRE performed on all patients
  – DRE for extracapsular extension
    • Seminal vesicles palpable if potentially involved
    • Insensitive for some extraprostatic extension
  – MR imaging may identify area to biopsy
  – Extraprostatic biopsies not random
    • Based on DRE, Gleason, imaging
Clinical N and M Categories

• Imaging is not required to assign cN0 or cM0

• cN category
  – Based on physician judgment and nomograms
  – Identify possibility of cN1 then further study appropriate

• Clinical M category
  – Only physical exam required to assign cM0
  – If signs or symptoms then further study appropriate
  – Mets may be cM1 or pM1 with subcategories a, b, or c
Pathologic T, N, and M Categories

• **pT category**
  – Must meet criteria of total or radical prostatectomy
  – All clinical findings + op findings + specimen path report

• **pN category**
  – Must have microscopic assessment of at least 1 node to assign
  – No node removed is pNX

• **Pathologic M category**
  – Only physical exam required to assign cM0
  – Imaging not required to assign cM0
  – If signs or symptoms then further study appropriate
  – Mets may be cM1 or pM1 with subcategories a, b, or c
PSA

• PSA is prognostic factor category required for staging
  – Category just like T, N, and M
  – Important to document

• PSA must be measured pre-diagnosis
  – Means prior to digital rectal exam
  – Means prior to biopsy
  – Any manipulation of prostate may raise PSA levels

• If multiple PSA tests, use last pre-diagnosis test

• PSA not available
  – Common when incidental finding at time of surgery
  – May not be able to assign stage group with PSA X
Gleason

• Gleason is prognostic factor category required for staging
  – Category just like T, N, and M
  – Important to document

• Gleason pattern and score assigned to each specimen
  – Inherent morphologic heterogeneity of prostate ca
  – This means normal to have different grades throughout tumor
  – Highest Gleason used for staging

• Clinical stage Gleason
  – Based on biopsy or TURP during that stage timeframe

• Pathologic stage Gleason
  – Based on bx, TURP, prostatectomy during that stage timeframe
  – Highest Gleason used for staging
Criteria for Clinical Classification

• **Patient undergoing diagnostic workup**
  – Elevated PSA
  – DRE
  – Diagnostic biopsy
  – Identified on TURP due to urinary symptoms
  – Imaging in certain circumstances, see NCCN guidelines

• **Incidental finding during prostatectomy**
  – **No** clinical stage assigned
  – Never assign stage in retrospect, cannot go back in time
Diagnostic vs. Treatment

- Diagnostic procedures
  - Biopsies
  - TURP

- Surgical treatment of primary site
  - Total prostatectomy
  - Radical prostatectomy
  - If nodal dissection not done, still considered treatment
Treatment Satisfying Stage Classification

• Pathologic staging
  – Total/radical prostatectomy satisfies criteria
  – Nodal dissection not required to qualify for staging
  – Rarely biopsy of highest T and N used to qualify
    • Must have both categories biopsied
    • Not assigned based on just highest T category

• Postneoadjuvant therapy staging NOT appropriate
  – No neoadjuvant therapy outside of clinical trials
    • Neoadjuvant ADT short term (4-6 months) treatment
    • Neoadjuvant ADT long term (2-3 years) treatment
  – Lupron shot prior to surgery not neoadjuvant treatment for staging
  – Rule for staging, not for registry treatment fields
Blank vs. X

• Tell patient’s story through staging

• Clinical staging – story of pt’s diagnosis and workup
  – cTX = physician did not examine patient, no DRE
  – cT blank = registrar had no access to information
  – cT blank = no workup for pt, incidental finding at surgical treatment

• Pathologic staging – pt’s story through surgical treatment
  – pTX = someone lost specimen between OR and path dept
  – pT blank = pt didn’t have surgical treatment
  – pT blank = registrar had no access to information
Case Scenario
Diagnostic Workup

• History/chief complaint
  – 77 year old male with urinary retention
  – Admitted for transurethral resection prostate (TURP)

• Physical exam
  – Rectal: BPH

• Procedure
  – TURP, cystolitholapaxy: 3-4 bladder stones all <1cm, friable urethra, especially distal to verumontanum with bleeding from scope trauma, concerning for malignancy

• Pathology report
  – Prostatic adenocarcinoma involving 5% of chips in transurethral resection prostate
  – Gleason score 4+3=7
Clinical Staging Information

• Physical exam
  – BPH stated, infers negative exam
  – Exam is legal requirement before surgical procedure

• Procedure
  – Must understand terminology used in report
    – Verumontanum
      • Part of distal prostatic urethra
      • Single most important anatomic landmark in TURP
  – Without that knowledge, could interpret as urethral primary
  – No description to play a role in staging

• Pathology report
  – Gleason 7
  – Involving 5% of tissue
Clinical Staging Answer & Rationale

• cT1a
  – Exam only found BPH, which means no apparent tumor
  – Incidental finding in 5% of TURP tissue

• cN0
  – No reason to suspect nodal involvement, NCCN guidelines

• cM0
  – No signs or symptoms of mets

• PSA X
  – Not performed, cancer not suspected, do NOT use lowest value

• Gleason 7

• Stage unknown
  – Gleason 7 would fit in stage IIA, but PSA is unknown
  – Gleason X and PSA X stage I is not accurate
Treatment

- History & physical
  - 67 year old male with PSA of 9.62
  - DRE: 4x4cm prostate with induration in both lobes, cT2c
  - CT pelvis and bone scan negative
  - Biopsy: bilateral poorly differentiated prostatic ca

- Operative report
  - Radical prostatectomy with bilat pelvic lymphadenectomy: no gross mets in nodes, no gross extension outside prostate, palpable disease bilaterally at mid.

- Pathology report
  - Invasive poorly diff prostatic adenocarcinoma, Gleason 4+3=7. Multifocal and involves both lobes prostate, 2cm greatest dimension, 40% of tissue evaluated. Lt seminal vesicle involved. Extensive extracapsular extension. Margins neg. Multifocal and extensive perineural invasion. 0/12 positive lymph nodes.
Pathologic Staging Information

• Surgery
  – Patient had surgical resection qualifying for pathologic staging

• Clinical staging information
  – cT2c PSA <20

• Operative report
  – Palpable bilateral disease
  – No gross nodes/extraprostatic involvement

• Pathology report
  – Gleason 7
  – Bilateral disease
  – Left seminal vesicle involved
  – Extracapsular extension
  – Margins negative & perineural invasion plays no role in staging
  – No pelvic nodes involved
Pathologic Staging Answer & Rationale

- **pT3b**
  - Bilateral lobes
  - Extraprostatic and seminal vesicle involvement

- **pN0**
  - Pelvic nodes negative

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

- **PSA <20**
  - 9.6

- **Gleason 7**

- **Stage III**
Information and Questions on AJCC Staging
Stage Classifications

- **Pathologic** – p
  - **Clinical** – c
    - **Date of Diagnosis**
      - Diagnostic Workup – phy exam, imaging, bx
  - **Surgical Treatment**
  - **Pathology Report**
    - Systemic or Radiation Therapy
    - Evaluation by imaging & physical exam
    - Surgical Treatment
    - Pathology Report

- **Clinical** – c
  - **Pathologic** – p
  - **Posttherapy** – yc
  - **Posttherapy** – yp
AJCC Web site

- https://cancerstaging.org

- Cancer Staging Education Registrar menu includes
  - Timing is Everything – Stage Classifications
  - Critical Clarifications for Registrars
  - Disease Site Webinars
    - 5 sites: melanoma, lung, breast, prostate, colorectum
  - AJCC Curriculum for Registrars
    - 4 free self-study modules of increasing difficulty on staging rules
      - Each modules consists of 7 lessons, including recorded webinar with quizzes
  - Presentations
    - Self-study or group lecture materials, including blank vs. X
AJCC Web site

- https://cancerstaging.org

- Cancer Staging Education **Physician menu** includes
  - Articles
    - 18 articles on AJCC 7th edition staging in various medical journals
  - Webinars
    - 14 free webinars on 7th edition staging rules and some disease sites

- Cancer Staging Education **General menu** includes
  - Staging Moments
    - 15 case-based presentations in cancer conference format to promote accurate staging with answers and rationales
Order at http://cancerstaging.net
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
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
Upcoming Webinar

Seventh Edition Staging 2017

Breast Cancer

May 18, 2017
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