Contributors:

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Lung Case # 1
Presentation of New Case

• Newly diagnosed lung cancer patient

• Presentation at Cancer Conference for treatment recommendations and clinical staging
Lung Case # 1
Imaging Results

• 75 yr old male who presented with an abnormal CXR during workup for another condition, no symptoms

• 50 yr smoking history
Lung Case # 1
Imaging Results

- Chest x-ray- 1.8cm mass density right lower lobe (RLL) lung

- CT chest- 2cm mass RLL lung, no hilar or mediastinal lymphadenopathy

- PET/CT- RLL lung nodule with a maximum SUV of 22.7, suspicious for lung malignancy; no evidence of distant disease
Lung Case # 1
Diagnostic Procedure

• Procedure
  – CT guided biopsy RLL lung

• Pathology Report
  – Adenocarcinoma
  – Grade 2
Clinical Staging

- Clinical staging
  - Uses information from physical exam, imaging, and diagnostic biopsy

- Purpose
  - Select appropriate treatment
  - Estimate prognosis
• Synopsis: patient with 2cm adenoca lesion, nodes neg on imaging

• What is the clinical stage?
  – T____
  – N____
  – M____
  – Stage Group______
Lung Case # 1
Clinical Staging

- Clinical Stage correct answer
  - cT1b
  - cN0
  - cM0
  - Stage Group IA2

- Based on stage, treatment is selected

- Review treatment guidelines for this stage
• Rationale for staging choices
  – cT1b for ca >1cm but ≤2cm
  
  – cN0 because nodes were clinically negative on imaging

  – cM0 because there were no signs or symptoms to suggest distant metastases; if there were, appropriate tests would be performed before developing a treatment plan
Lung Case # 1
Presentation after Surgery

• Procedure chosen based on small lesion and clinically negative nodes in an elderly patient, Stage IA2, is resection and node sampling

• Presentation at Cancer Conference for adjuvant treatment recommendations and pathologic staging
Lung Case # 1
Treatment Options

• Review treatment guidelines for this stage

• Discuss appropriate treatment plans for this patient
Lung Case # 1
Surgery & Findings

• Surgery
  – RLL lobectomy
  – Hilar & mediastinal node resection

• Operative findings
  – No additional information
Lung Case # 1
Pathology Results

- Adenocarcinoma
- Size of tumor – 3.4cm
- Grade - Moderately differentiated
- Visceral pleural involvement, PL2
- Margins negative
- 4 peribronchial, 1 paraesophageal, 1 paratracheal, and 1 subcarinal nodes negative
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)
Lung Case # 1
Pathological Staging

• Synopsis: patient with 3.4cm adenoca into visceral pleura, PL2, intrapulmonary and mediastinal nodes negative

• What is the pathological stage?
  – T____
  – N____
  – M____
  – Stage Group______
Lung Case # 1
Pathological Staging

• Pathological Stage correct answer
  – pT2a
  – pN0
  – cM0
  – Stage Group IB

• Based on pathological stage, there is more information to estimate prognosis and discuss adjuvant treatment
Lung Case # 1
Pathologic Staging

• Rationale for staging choices
  – pT2a based on size (>3cm and <4cm) and invading visceral pleura
  – pN0 because intrapulmonary and mediastinal nodes were negative
    • 6 nodes/stations should be examined
  – cM0 - use clinical M with pathological staging unless there is microscopic confirmation of distant metastases
Prognostic Factors/Registry Data Collection

• Applicable to this case
  – Separate tumor nodules: none
  – Visceral and parietal pleural invasion: PL2
T2 tumor >3cm but <5cm or having any of the following features: involves main bronchus but without involvement of carina, invades visceral pleura, associated with atelectasis or obstructive pneumonitis involving part or all of lung

T2a Tumor >3cm but <4cm

Lung Case # 1
Recap of Staging

• Summary of correct answers
  – Clinical stage  cT1b cN0 cM0 Stage Group IA2
  – Pathologic stage  pT2a pN0 cM0 Stage Group IB

• 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

- Pathologic Staging
  - Based on clinical data PLUS operative findings and resected specimen pathology report
  - Used to evaluate end-results (survival)