

AJCC Staging Moments

AJCC TNM Staging 8th Edition

Lung Case #1



AJCC

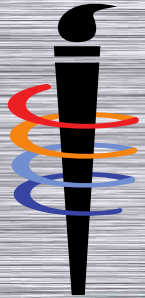
American Joint Committee on Cancer

Validating science. Improving patient care.

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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

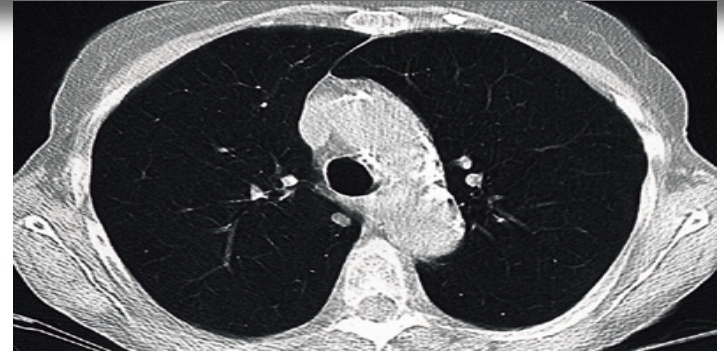
- 75 yr old male who presented with an abnormal CXR during workup for another condition, no symptoms
- 50 yr smoking history



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



Used with permission. Swanson K, Jett J. *Atlas of Cancer*. Edited by Maurie Markman, David H. Johnson. ©2002 Current Medicine, Inc.



Lung Case # 1

Diagnostic Procedure

- Procedure
 - CT guided biopsy RLL lung
- Pathology Report
 - Adenocarcinoma
 - Grade 2



Lung Case # 1

Clinical Staging

- Clinical staging
 - Uses information from physical exam, imaging, and diagnostic biopsy
- Purpose
 - Select appropriate treatment
 - Estimate prognosis



Lung Case # 1

Clinical Staging

- 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



Lung Case # 1

Clinical Staging

- Rationale for staging choices
 - cT1b for ca $>1\text{cm}$ but $\leq 2\text{cm}$
 - 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



Lung Case # 1

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 ($>3\text{cm}$ and $\leq 4\text{cm}$) 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

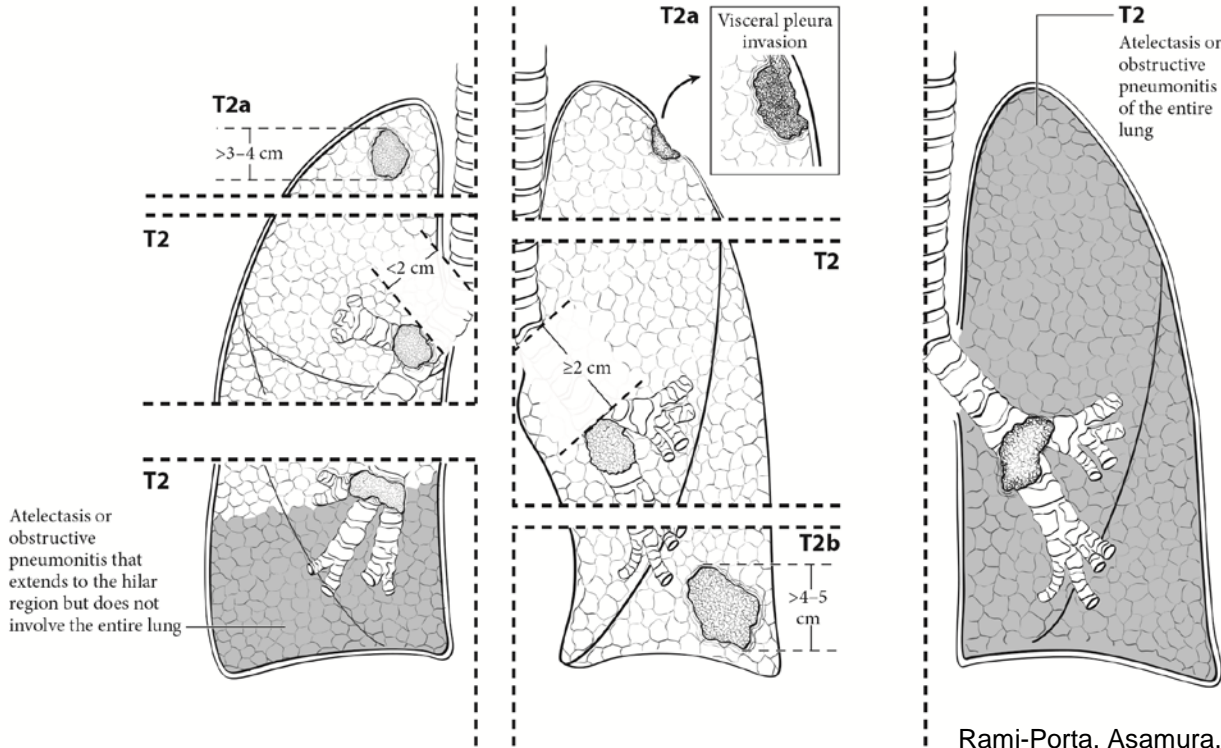


Prognostic Factors/Registry Data Collection

- Applicable to this case
 - Separate tumor nodules: none
 - Visceral and parietal pleural invasion: PL2



T2



Atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung

T2 tumor >3 cm but <5 cm 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 >3 cm but <4 cm

Rami-Porta, Asamura, Travis, and Rusch. Lung. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017



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)

