Early-stage NSCLC
Clinical Case Presentation

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Symptoms

Pain left shoulder
Findings

Patient DLG 1937
Q1. Which diagnostic procedure?

1. Bronchoscopy
2. EBUS
3. CT-guided transthoracic biopsy
4. Sputum Analysis
5. Liquid biopsy

(one answer)
Diagnosis

Transthoracic CT guided biopsy
  → Squamous cell carcinoma p63 positive
Staging

Patient DLG 1937

MRI brain without metastases

MRI, magnetic resonance imaging
Q2. What is the clinical/radiological stage (TNM, 7th edition)?

1. pT1cN0cM0
2. pT2cN0cM0
3. cT2acN0cM0
4. pT2cN1cM0
5. cT1pN1cM0

(one answer)
TNM Staging & UICC classification lung cancer
(comparison of the 7th and the 8th editions)

<table>
<thead>
<tr>
<th>DESCRIPTOR</th>
<th>SEVENTH EDITION</th>
<th>EIGHTH EDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>T component</td>
<td></td>
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</tr>
<tr>
<td>0 cm (pure lepidic adenocarcinoma ≤3 cm total size)</td>
<td>T1a if ≤2 cm, T1b if &gt;2–3 cm</td>
<td>T1a (A15)</td>
</tr>
<tr>
<td>≤0.5 cm invasive size (lepidic predominant adenocarcinoma ≤3 cm total size)</td>
<td>T1a if ≤2 cm, T1b if &gt;2–3 cm</td>
<td>T1a</td>
</tr>
<tr>
<td>≤1 cm</td>
<td>T1a</td>
<td>T1a</td>
</tr>
<tr>
<td>&gt;1–2 cm</td>
<td>T1b</td>
<td>T1b</td>
</tr>
<tr>
<td>&gt;2–3 cm</td>
<td>T1b</td>
<td>T1b</td>
</tr>
<tr>
<td>&gt;3–4 cm</td>
<td>T2a</td>
<td>T2a</td>
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<tr>
<td>&gt;4–5 cm</td>
<td>T2a</td>
<td>T2a</td>
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<tr>
<td>&gt;5–7 cm</td>
<td>T2b</td>
<td>T3</td>
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<tr>
<td>&gt;7 cm</td>
<td>T3</td>
<td>T3</td>
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<tr>
<td>Bronchus &lt;2 cm from carina</td>
<td>T3</td>
<td>T2</td>
</tr>
<tr>
<td>Total atelectasis/pneumonitis</td>
<td>T3</td>
<td>T2</td>
</tr>
<tr>
<td>Invasion of diaphragm</td>
<td>T3</td>
<td>T4</td>
</tr>
<tr>
<td>Invasion of mediastinal pleura</td>
<td>T3</td>
<td>-</td>
</tr>
<tr>
<td>N component</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No assessment, no involvement, or involvement of regional lymph nodes</td>
<td>NX, N0, N1, N2, N3</td>
<td>No change</td>
</tr>
<tr>
<td>M component</td>
<td></td>
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</tr>
<tr>
<td>Metastases within the thoracic cavity</td>
<td>M1a</td>
<td>M1a</td>
</tr>
<tr>
<td>Single extrathoracic metastasis</td>
<td>M1b</td>
<td>M1b</td>
</tr>
<tr>
<td>Multiple extrathoracic metastases</td>
<td>M1b</td>
<td>M1c</td>
</tr>
</tbody>
</table>

TNM, tumour, node, metastasis; UICC, Union for International Cancer Control
Staging

cT2acN0cM0, Stage IB

TNM, tumour, node, metastasis
Comorbidities:

- Coronary heart disease
- COPD Stage 2, with severe diffusion impairment
Q3. How would you treat?

1. Resection
2. SBRT
3. Chemo/Radiotherapy
4. Chemotherapy
5. Immunotherapy

(one answer)
cT2acN0cM0, Stage IB
➢ Radiotherapy: 10x 6 Gy

TNM, tumour, node, metastasis
Follow-up (3 years)

Patient DLG 1937
None
X-ray thorax as part of check-up
Findings

Patient BU 1956
Q4. Which diagnostic procedure?

1. Bronchoscopy
2. EBUS
3. CT-guided transthoracic biopsy
4. Sputum Analysis
5. Liquid biopsy

(one answer)
rEBUS (radial endobronchial ultrasound)

Biopsy lung: adenocarcinoma cells
Staging

MRI brain, no metastases

SUVmax hilum: 3.0

MRI, magnetic resonance imaging; SUVmax, maximum standardised uptake value
Q5. What is the clinical/radiological stage (TNM, 7th edition)?

1. cT1cN2cM0
2. cT2cN1cM0
3. cT2pN1cM0
4. pT2cN1cM0

(one answer)
Staging

Patient BU 1956

cT2acN1cM0, stage IIB

Primary tumour

Lymphnodes

TNM, tumour, node, metastasis
Q6. How would you treat?

1. Resection
2. SBRT
3. Chemo/Radiotherapy
4. Chemotherapy
5. Immunotherapy

(one answer)
Resection:
Left lower lobe resection with lymphadenectomy (position: left 9, 11, 8, 12 & 7, 5)
Treatment

Resection:
Left lower lobe resection with Lymphadenectomy
(position: left 9, 11, 8, 12 & 7, 5)

Pathology report (AJCC, 7th edition):
Acinar Adenocarcinoma
pT2a, pN2* (6/10), G3, R0; KRASmut, Stage IIIA

*N2: positive at level 11L & 7
Q7. How would you treat?

1. Radiotherapy (Mediastinum)
2. Chemo/Radiotherapy
3. Chemotherapy, adjuvant
4. Immunotherapy, adjuvant
5. Analysis of mutational load

(one answer)
Treatment

Resection:
Left lower lobe resection with lymphadenectomy
(position: left 9, 11, 8, 12 & 7, 5)

Pathology report (AJCC, 7th edition):
Acinar adenocarcinoma
pT2a, pN2 (6/10), G3, R0; KRASmut, Stage IIIA

Adjuvant chemotherapy
4 cycles cisplatin pemetrexed

AJCC, American Joint Committee on Cancer; TNM, tumour, node, metastasis
Treatment algorithm stage IIIA

ACCP, American College of Chest Physicians; CT, computed tomography; LN, lymph node; NSCLC, non-small-cell lung cancer; PET, positron-emission tomography
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