Case 2
* 70M with 6 mos of dyspnea
* Former smoker (10 pk/yrs; quit 35 yrs earlier)
* Asbestos exposure: No
* Radiology: Diffuse bilateral GGOs with reticulation; several small subpleural nodular densities; no pleural disease or effusion
* Tx: Cisplatin and pemetrexed
* F/U: DOD 44 mos
Case 2
Case 2
Case 2
Case 2
Case 2
Case 2
Case 2
Calretinin

Case 2

TTF-1
Case 2

Immunostaining results:
Positive: Calret, WT1,D2-40, CK5/6, PanK
Negative: TTF-1, pCEA, MOC31

No microscopic pleural involvement was identified.

**Diagnosis:** Mesothelioma presenting as diffuse interstitial lung disease without obvious pleural involvement
Diffuse Intrapulmonary Malignant Mesothelioma Masquerading as Interstitial Lung Disease

A Distinctive Variant of Mesothelioma

Brandon T. Larsen, MD, PhD,* Julianne R. H. Klein, MD,† Helena Hornychova, MD,‡ Rathna Nuti, BA,§ Seshadri Thirumala, MD,ǁ Kevin O. Leslie, MD,¶ Thomas V. Colby, MD,‖ and Henry D. Tazelaar, MD¶

AmJSurgPathol 2013; 37: 1555-64
This series and the literature:

Sx: dyspnea, cough

Radiology: Pulmonary infiltrates; PTX in 3/8

9 cases; 8M, 1F; Ages 44-81 yrs

Asbestos exposure: 3/7 with available information

F/U in 5: 4 DOD (4 wks – 44 mos), 1 AWD at 28 mo
Immunostaining results

Positive:
- Calret: 5/5
- WT-1: 4/4
- D2-40: 5/5
- CK5/6: 5/5
- PanK: 4/4

Negative:
- TTF-1: 5/5
- pCEA: 5/5
- B72.3: 2/2
- MOC31: 3/3
- CD15: 4/4
- EMA: 1/1
- P63: 1/1

4 of the 5 had microscopic involvement of the pleura
Case 1

Case 3
Biphasic pattern of mesothelioma
Intrapulmonary mesothelioma can mimic:

1. Non-neoplastic disease: Interstitial fibrosis, nodular fibrosis, Organizing Pneumonia, DIP

2. Neoplastic disease: Acinar, lepidic and micropapillary patterns
Diffuse process of pleura, peritoneum, pericardium—
most common

Localized pleural, mediastinal, intra- pulmonary, intraabdominal mass—rare

- Mimic sclerosing mediastinitis

Metastatic disease:

- Lymphadenopathy—rare
- Interstitial lung disease—rare

Pneumothorax
LOCALIZED MALIGNANT MESEOTHELIOMAS

(Crotty et al., Allen et al.)

28 cases
19 men, 9 women (37-83 years); mean in 60’s
26 pleural, 2 peritoneal
Size: 2.8-10.0 cm (± pedunculation)
Histology: 18 epithelioid, 9 biphasic, 1 sarcomatoid
Immunohistochemistry as for diffuse meso
Follow-up in 17:

10 dead of disease (7 months to 6 years)
Relapse as discrete disease
1 dead of other causes
6 alive (6-96 months)
Resected Localized Malignant Mesothelioma of the Pleura
Mesothelioma at autopsy

From Google images
48F with chest pain and mediastinal fullness; 2 biopsies 1 year apart called sclerosing mediastinitis

Crotty et.al. Desmoplastic mesothelioma masquerading as sclerosing mediastinitis
Hum Pathol 1992; 23:79
Lymph Node Metastasis as the Initial Manifestation of Mesothelioma


Calretinin

WT1
Benign Mesothelial Cells in Lymph Nodes: A trap for the pathologist!

  2 cases mimicking metastatic carcinoma

Argani and Rosai Hum Pathol 29:339, 1998
  6 cases mimicking metastatic mesothelioma/carcinoma

  Retrospect. review of mediastinal LNs in benign disease
  8 cases identified
  Mesothelial cells missed on H & E in all but 1

Note: Most cases occur in the setting of chronic serosal inflammation
Benign Mesothelial Cells in Mediastinal Lymph Nodes in a Mediastinal Lymphoma

Implications for sentinel lymph node biopsies
Mesothelioma presenting as pneumothorax; “Blebs” resected
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Contralateral lung</td>
<td>35.8</td>
<td>26.8</td>
</tr>
<tr>
<td>Liver</td>
<td>31.9</td>
<td>55.9</td>
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<tr>
<td>Spleen</td>
<td>10.8</td>
<td>31.1</td>
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<tr>
<td>Kidney</td>
<td>8.7</td>
<td>30.1</td>
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<tr>
<td>Adrenal</td>
<td>10.2</td>
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<tr>
<td>Peritoneum</td>
<td>24.4</td>
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<tr>
<td>Bone</td>
<td>13.8</td>
<td>4.3</td>
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<tr>
<td>Brain</td>
<td>3.0</td>
<td>3.2</td>
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<tr>
<td>Thyroid</td>
<td>6.9</td>
<td>5.3</td>
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<tr>
<td>Pancreas</td>
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<td>6.4</td>
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<tr>
<td>Stomach</td>
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<td>4.3</td>
</tr>
</tbody>
</table>
Mesothelioma may not be considered in the differential when presenting in an unusual place or an unusual fashion.