Interesting case conference

10/8/12
Clinical Data:
• 85-year-old woman undergoing evaluation for vague gastrointestinal symptoms and unintentional weight loss.
• CT scans revealed the presence of omental caking and peritoneal carcinomatosis but no evidence of any discrete lung, renal, pancreatic, or liver masses.
• CT guided FNA and core biopsy of one of the omental masses was performed.
Cytomorphologic Findings:

Sheets and loosely-cohesive arrays of epithelioid cells.

Some cells exhibit two-toned cytoplasm, others exhibit prominent cytoplasmic vacuolization.

Occasional binucleation.

Intercellular windows appreciable in areas.
INVASION PRESENT
- infiltrating tumor cells
- desmoplasia
Differential Diagnosis:

1. Metastatic adenocarcinoma

2. Malignant mesothelioma (vs. benign reactive mesothelium)

3. Metastatic melanoma
Calretinin
FINAL DIAGNOSIS:

Positive for malignancy.

Consistent with malignant mesothelioma.
Lessons

• Peritoneal mesothelioma is much less common than adenocarcinoma.

• Nonetheless, there are cytomorphologic cues to raise awareness of the possibility of peritoneal mesothelioma including:
  – Intercellular windows
  – Two-toned cytoplasm
  – NOTE: cytoplasmic vacuolization does not exclude mesothelioma.

• EMA immunoreactivity can be seen in peritoneal mesothelioma (usually negative in reactive mesothelium) and adenocarcinoma.

• Utilization of a panel of immunostains is essential for an accurate diagnosis.
  – MOC-31 immunoreactivity favors adenocarcinoma
  – Calretinin and CK5/6 immunoreactivity favors mesothelial differentiation
  – D2-40 expression also favors mesothelial differentiation.