



## Hemepath Case 37: 70-Year-Old Female

### HISTORY

A 70-year-old female with a history of breast cancer presents with lethargy, and lymphadenopathy of the axillary and supraclavicular regions.

### CBC

Hgb (g/L)	Low
MCV	N
WBC	Low
Plt	N

### DESCRIPTION OF SLIDES

#### **Bone Marrow Aspirate (Slide 37b)**

The bone marrow aspirate shows several "cannonball" clusters of non-hematopoietic cells (see circles).

#### **Bone Marrow Biopsy (Slide 37a)**

The bone marrow biopsy shows several sites of involvement by a metastatic, non-hematopoietic malignancy (see circles). The way that the non-hematopoietic cells form glands suggests a metastatic adenocarcinoma, such as metastatic breast cancer. In areas, the metastatic cells are surrounded by a stromal response resembling desmoplasia (see arrow). Confirmation of the site of origin of this tumor may require further workup, such as special stains, although a telephone call to the patient's clinician is the most efficient "special stain".

\*\*\* To see the slide annotations in Imagescope, click on VIEW, then ANNOTATIONS, and then on the "eye" icon adjacent to the word "Layers". In the "Layer Attributes" box, a brief description of the annotations is provided. You may also click on individual layer region (e.g. region 1) in the "Layer Regions" box to locate each annotation – this is especially helpful in identifying annotations when the slide is not zoomed in. \*\*\*

### MORPHOLOGICAL DIAGNOSIS

Metastatic adenocarcinoma consistent with the patient's known previous breast cancer

### DISCUSSION

Carcinomas from various sites may commonly metastasize to the bone marrow. Breast and prostate are among the more common origins. A firm diagnosis of the site of origin

may require immunohistochemistry, although the patient's history may be equally diagnostic.