

Interesting Case Conference

08/13/2012

HISTORY

- 31 year old female
- PMH
 - Familial adenosis polyposis syndrome diagnosed @ age 17 with colectomy in 1999
 - Polycystic ovarian syndrome
 - AND ...

HISTORY

- Retroperitoneal mass, left, resection (5/2012):
Adrenocortical carcinoma, high-grade by mitotic activity.

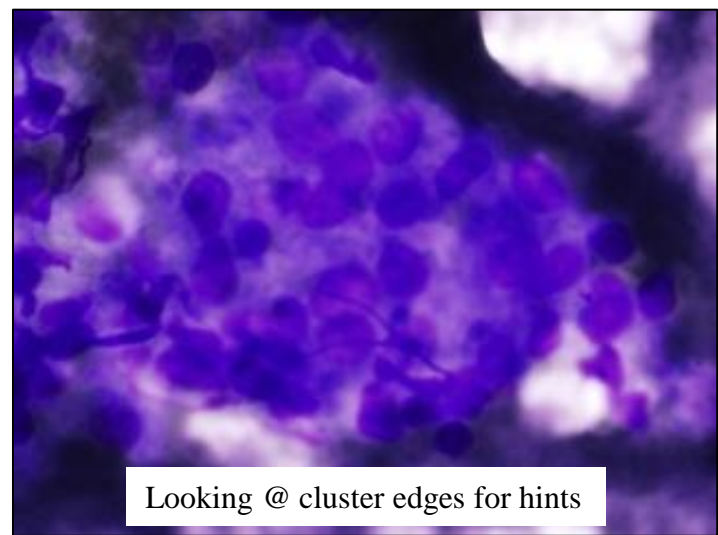
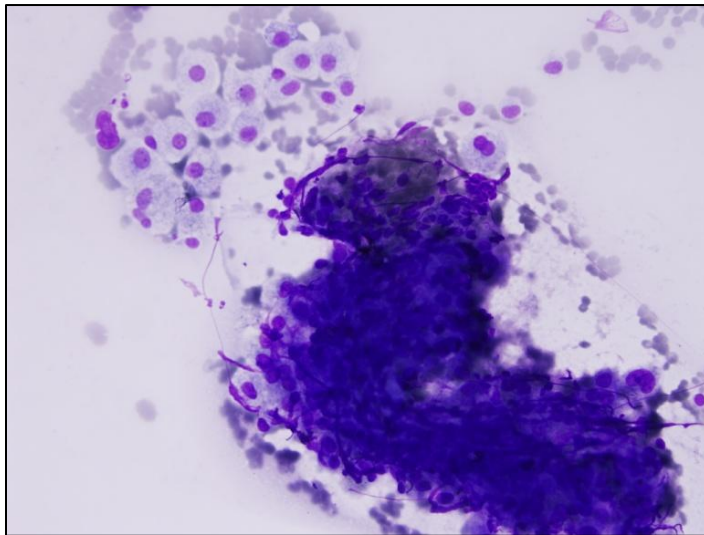
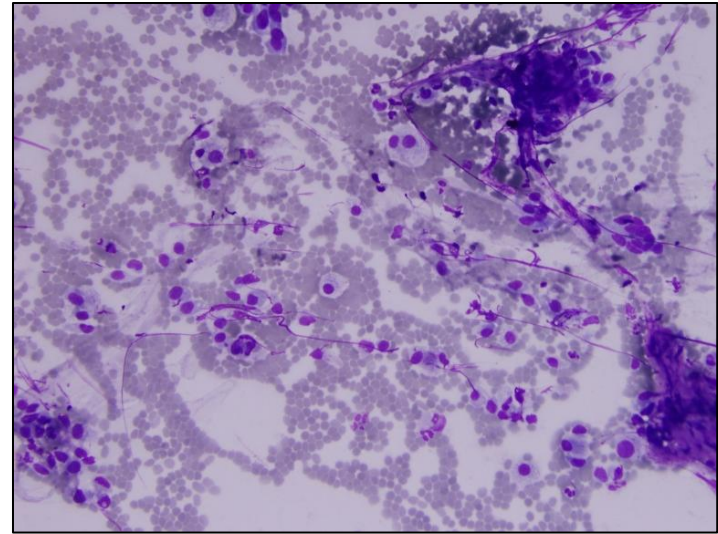
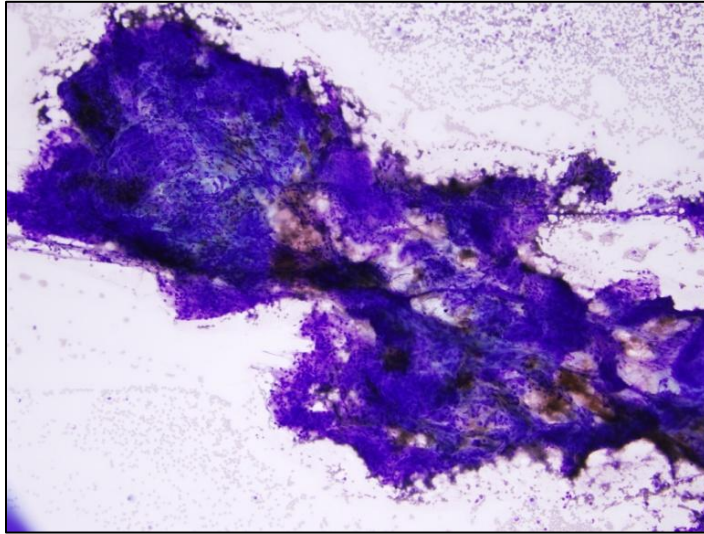
ADRENOCORTICAL CARCINOMA

Tumor Size:	11.9 x 9.1 x 6.2 cm
Tumor Weight:	1,243 grams, including kidney
Capsular Invasion:	Yes
Vascular Invasion:	Yes
Surgical Margins:	Negative
Necrosis:	Yes
Mitotic Rate:	148 mitoses per 50 high power fields
Grade:	High
Lymph nodes status:	N/A
Extra-adrenal extension:	Yes, focal soft tissue extension
Stage:	III
Immunohistochemistry:	(+) α -inhibin, synaptophysin, CD56, calretinin (focal), melan-A (-) myoglobin, CAM 5.2, EMA

HISTORY

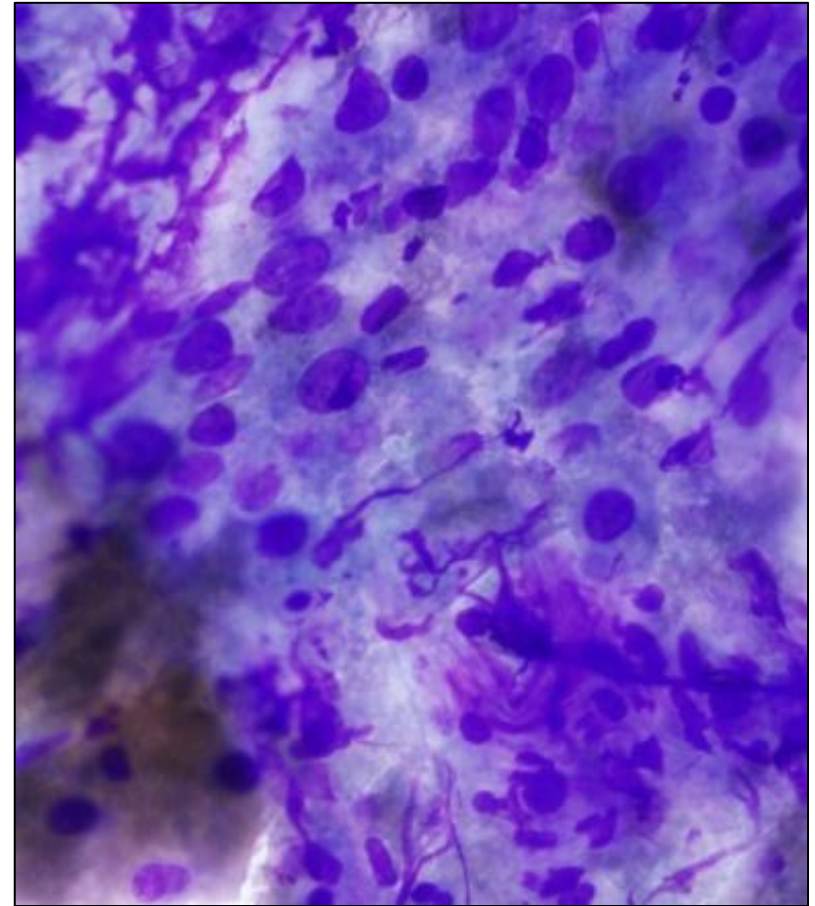
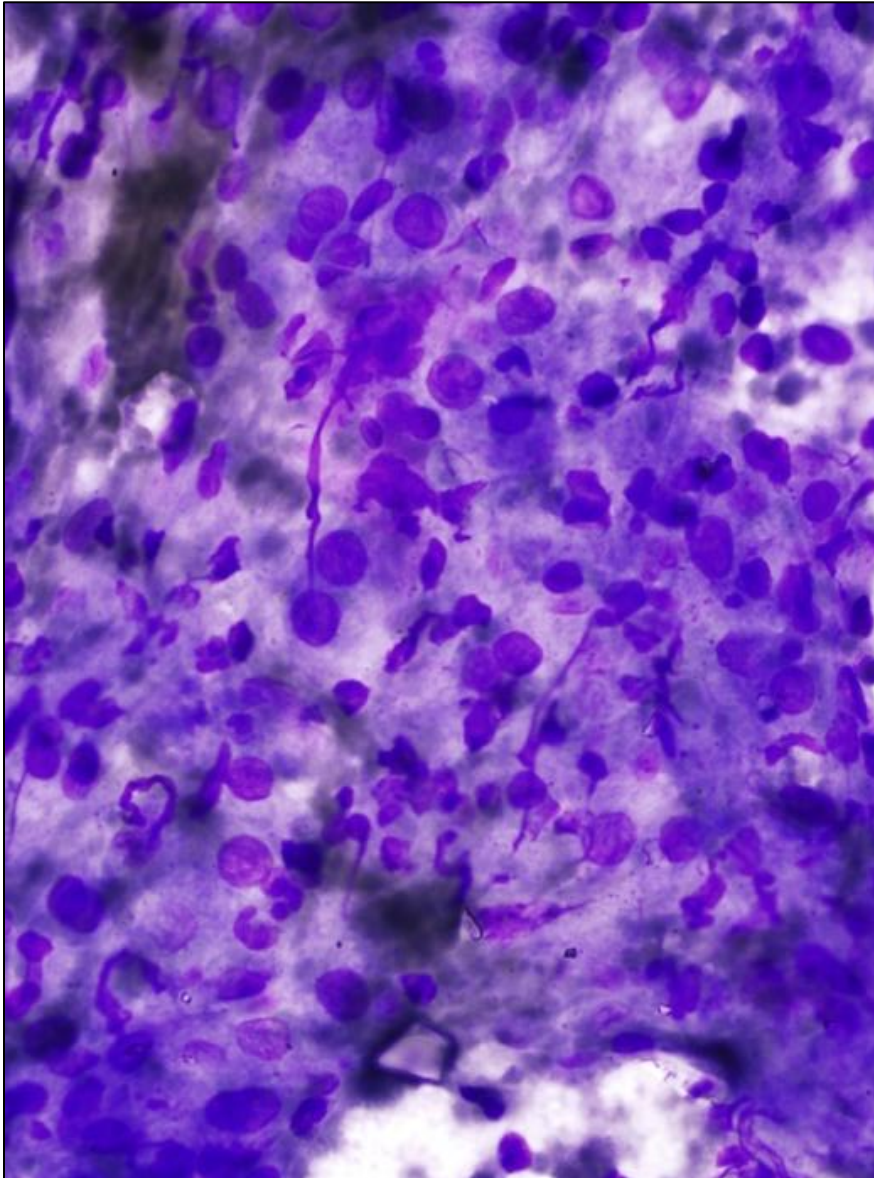
- Subsequent CT and PET scans
 - More lesions seen than before adrenalectomy (bilateral pulmonary nodules, liver nodules, mid-abdomen lesion)

Right pulmonary nodule: Fine needle aspiration and core biopsy

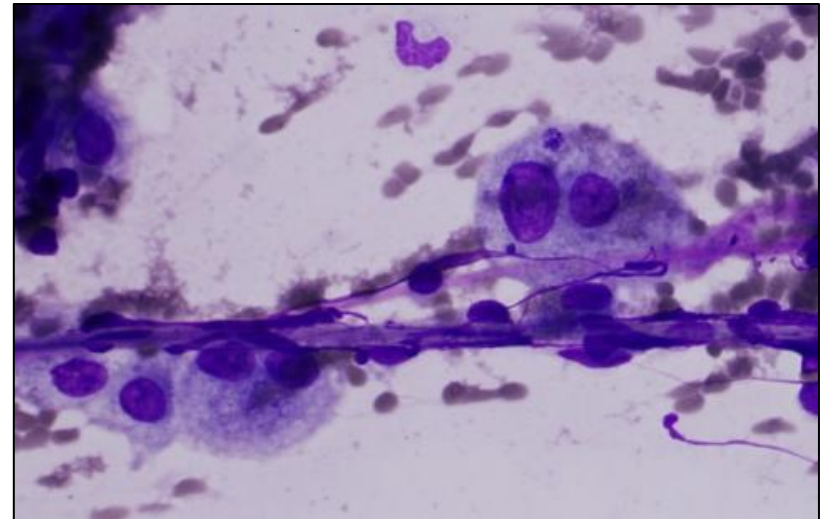
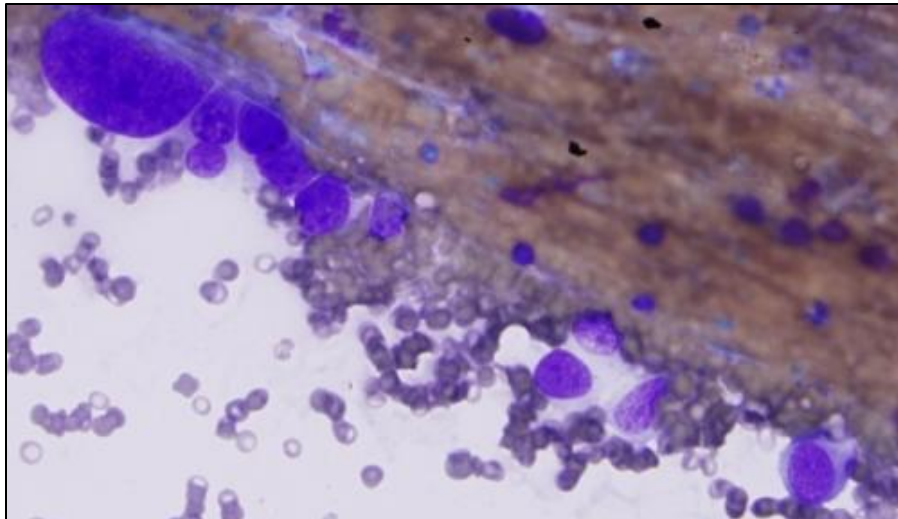
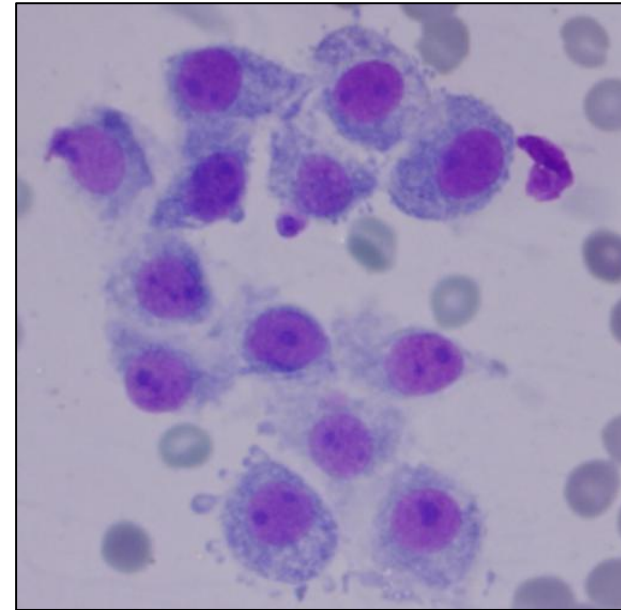
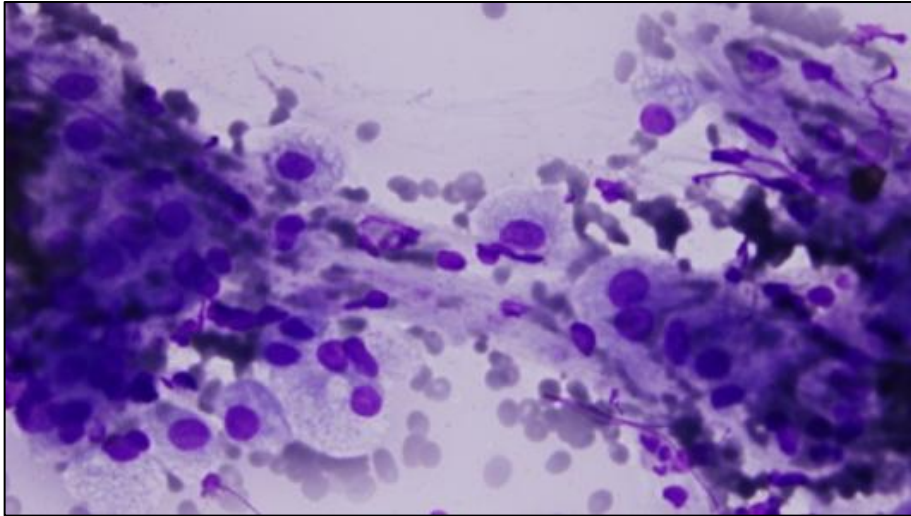


Looking @ cluster edges for hints

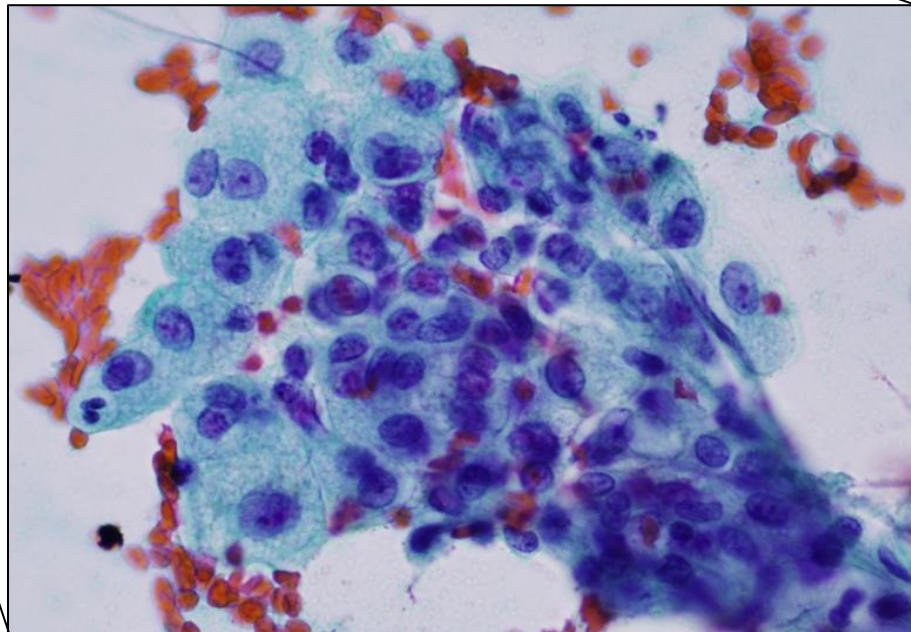
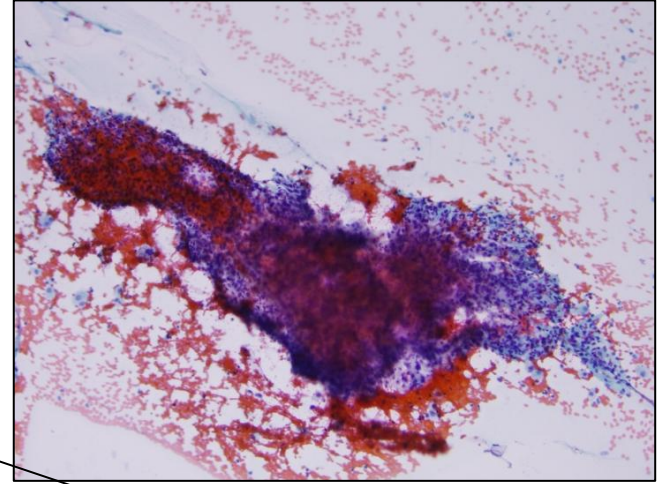
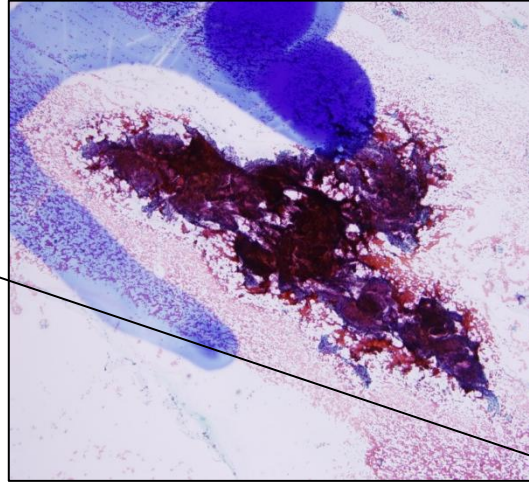
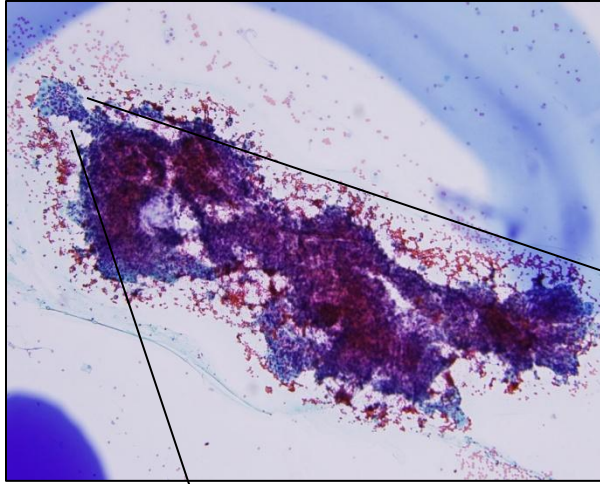
Diff-Quik stain: Looking through lighter areas of clusters



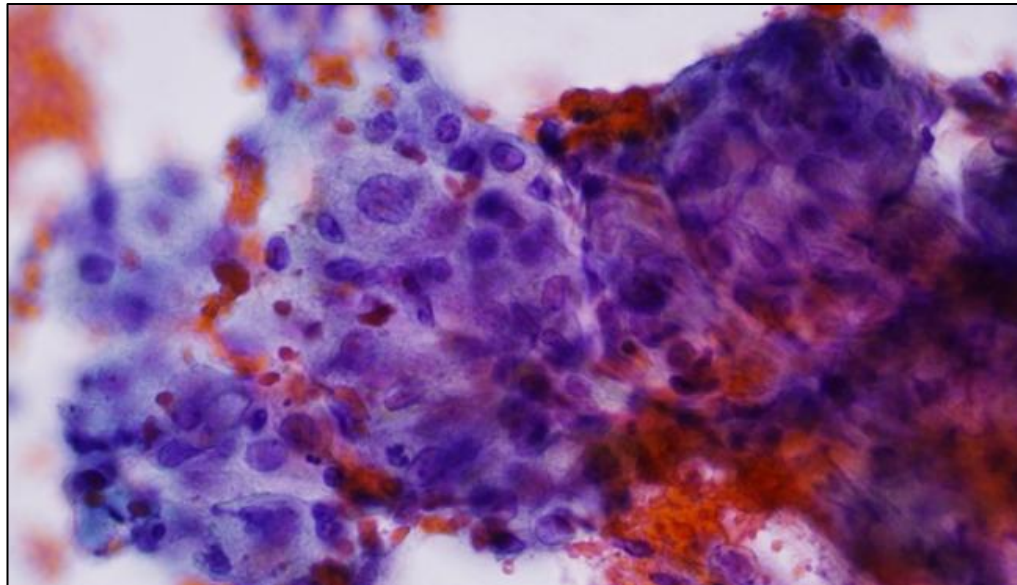
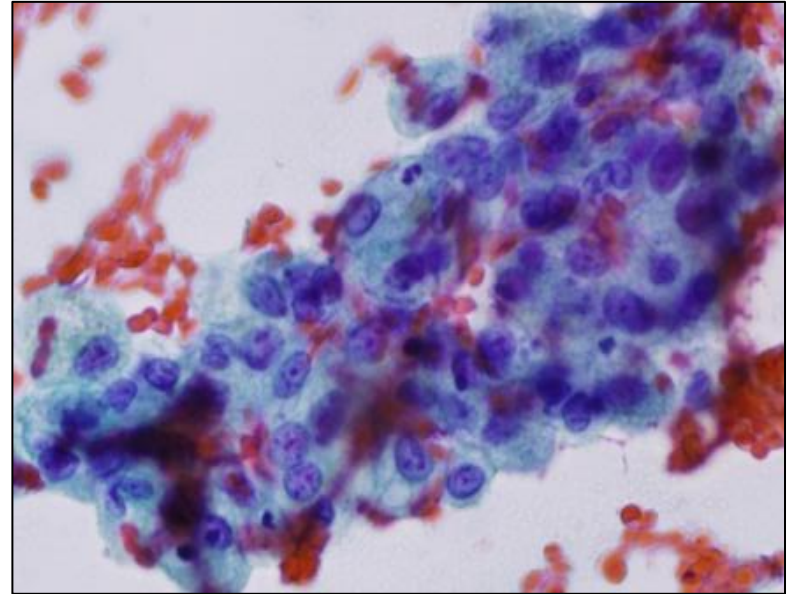
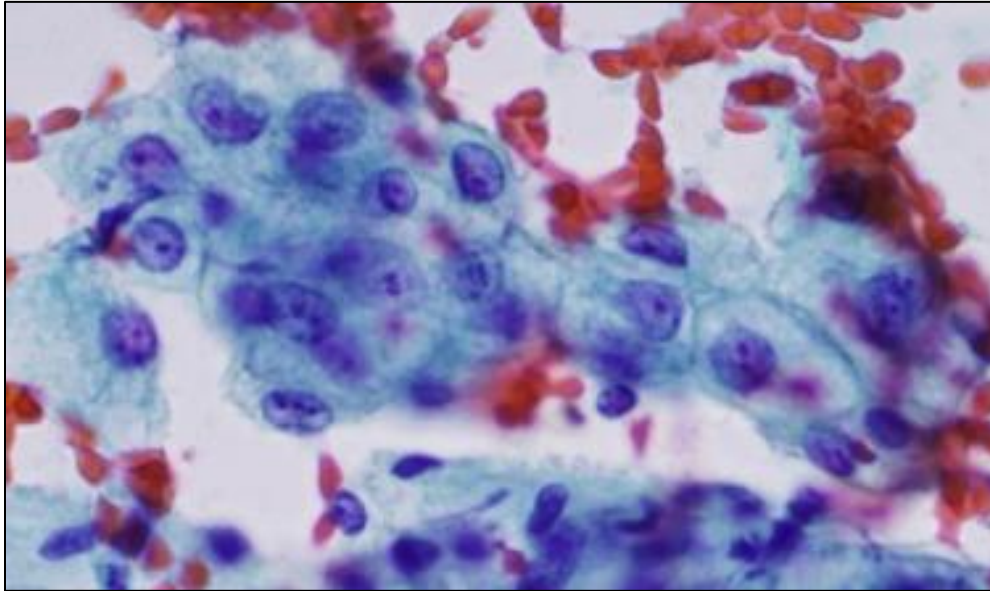
Diff-Quik stain



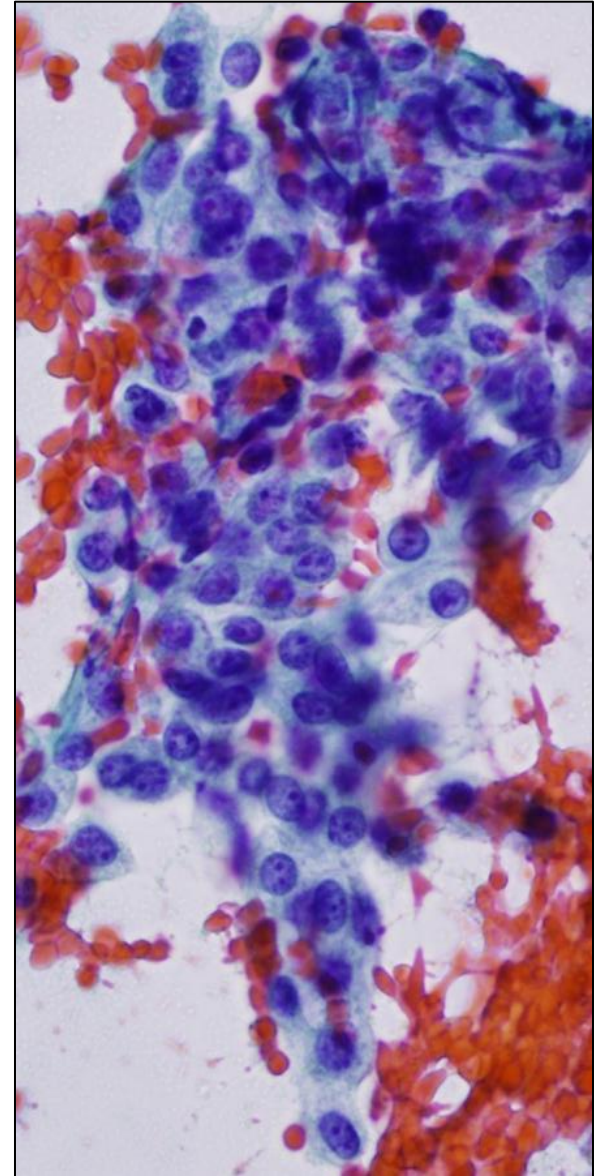
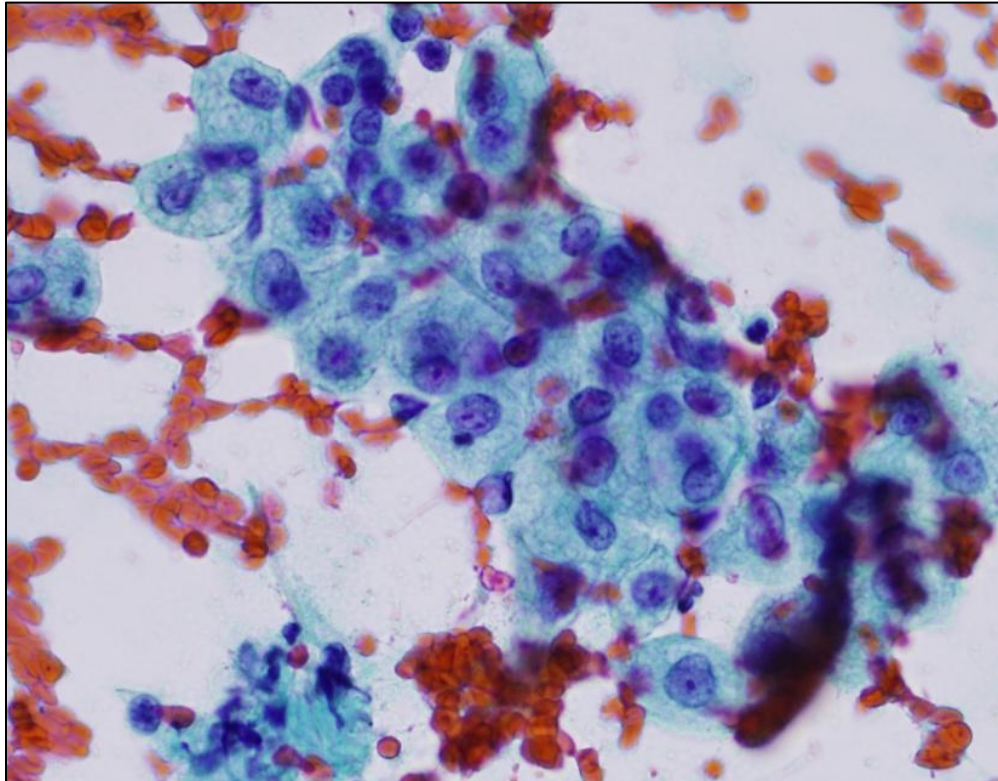
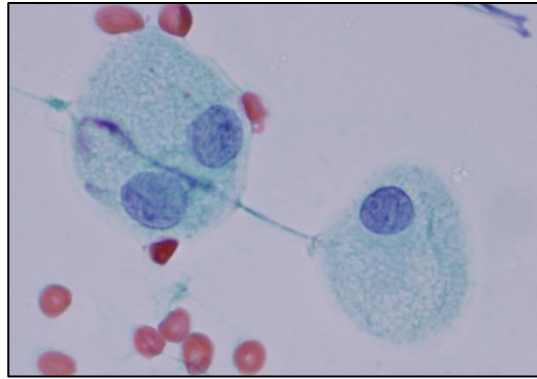
Pap stain



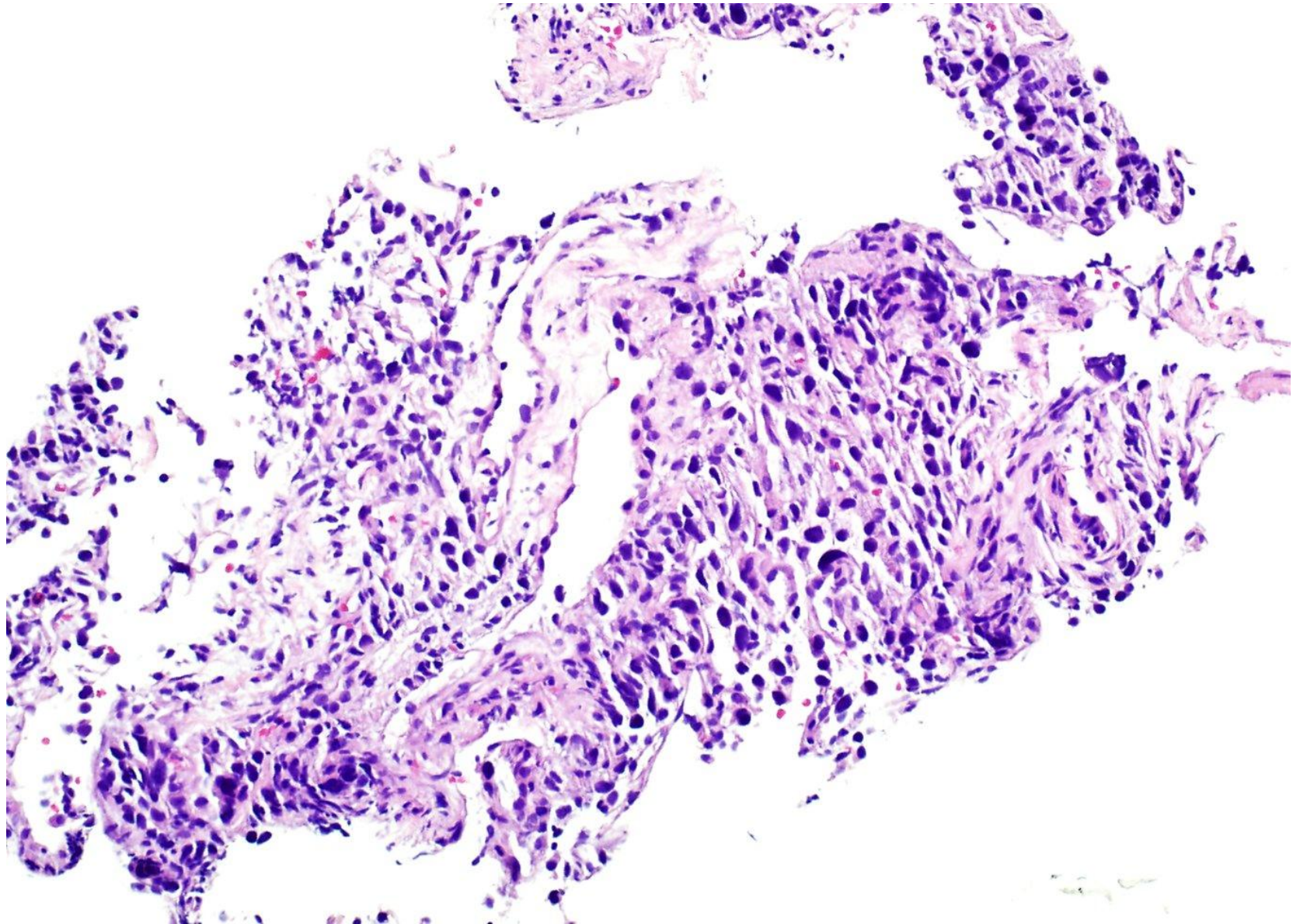
Pap stain



Pap stain

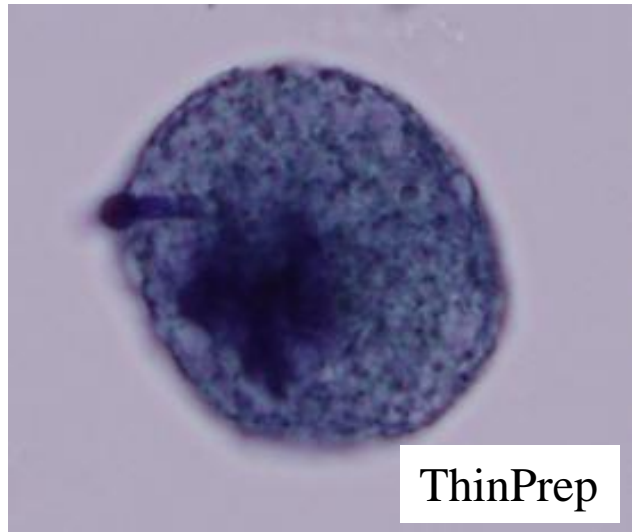


Concurrent Core Bx



DIFFERENTIAL DIAGNOSIS

- Adrenocortical carcinoma
- But if you didn't know the history...
 - Histiocytes
 - Renal cell carcinoma
 - Clear cell carcinoma
 - etc.



FINAL DIAGNOSIS

- Lung, right pulmonary nodule, fine needle aspiration and core biopsy:
 - Positive for malignant cells, morphologically consistent with metastasis from the patient's adrenocortical carcinoma.
 - Procedures performed at an outside hospital; blocks not available for confirmatory immunostains.
- LESSONS
 - As always, history is important.
 - For thick clusters, look at the edges for better visualization of the cells.

FOLLOW-UP

- Recommendation of doxorubicin, cisplatin, etoposide, and mitotane regimen.