# Unusual Cases

Michael Thrall MD



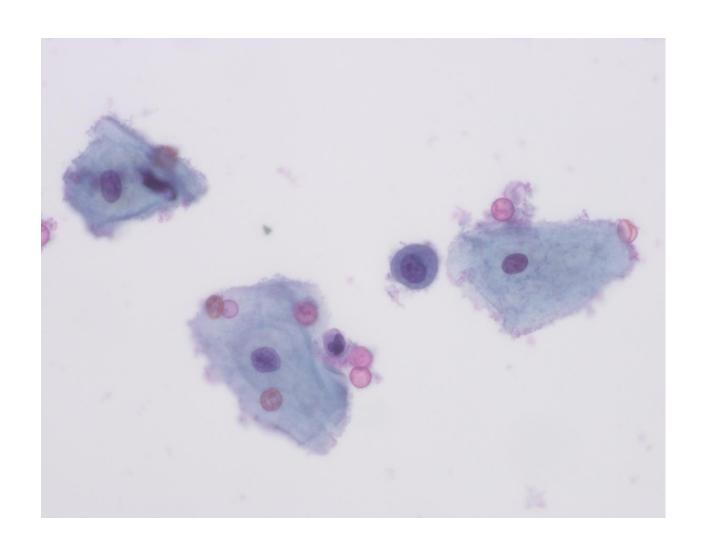
#### Case #1

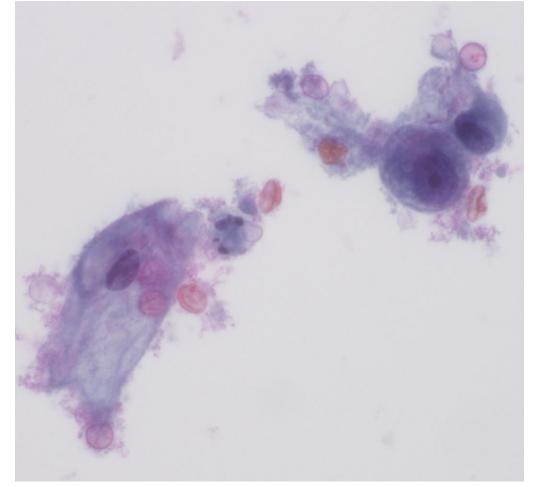


- 48 year old female
- History of Crohn's disease with vaginal fistula
- Vaginal ulcer noted during pelvic exam

# Small cells with large nuclei

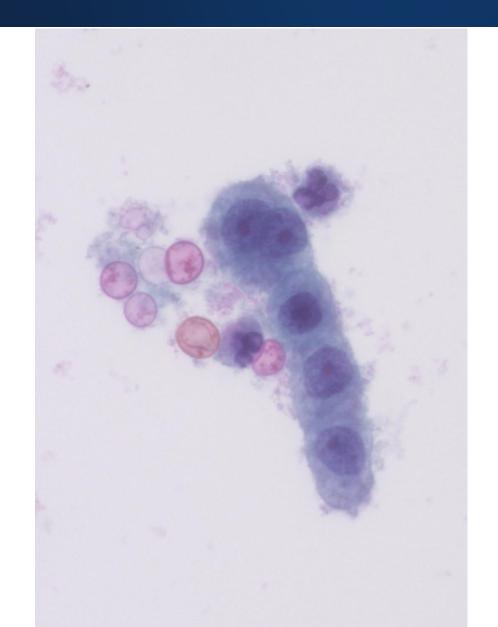


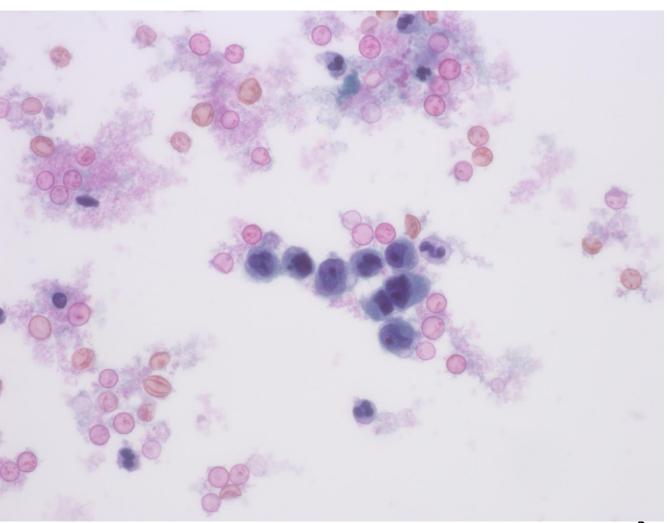




### Background blood and debris



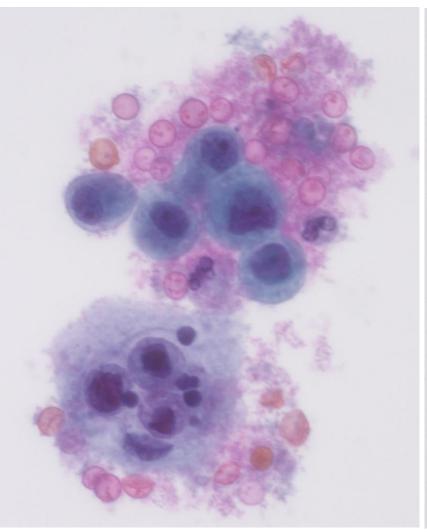


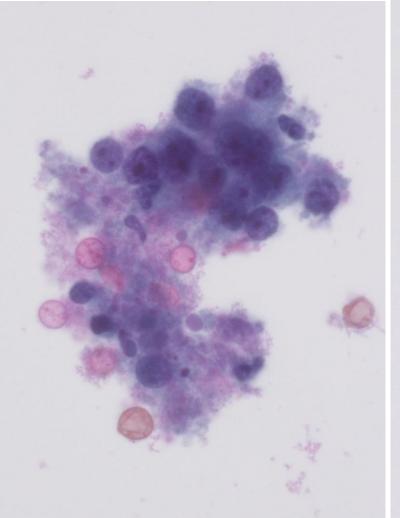


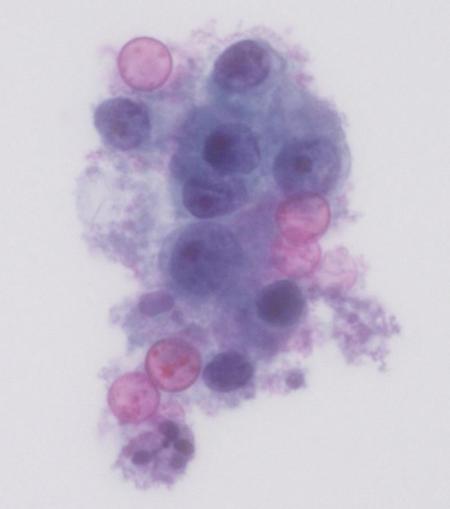
# Loosely cohesive and

#### degenerating



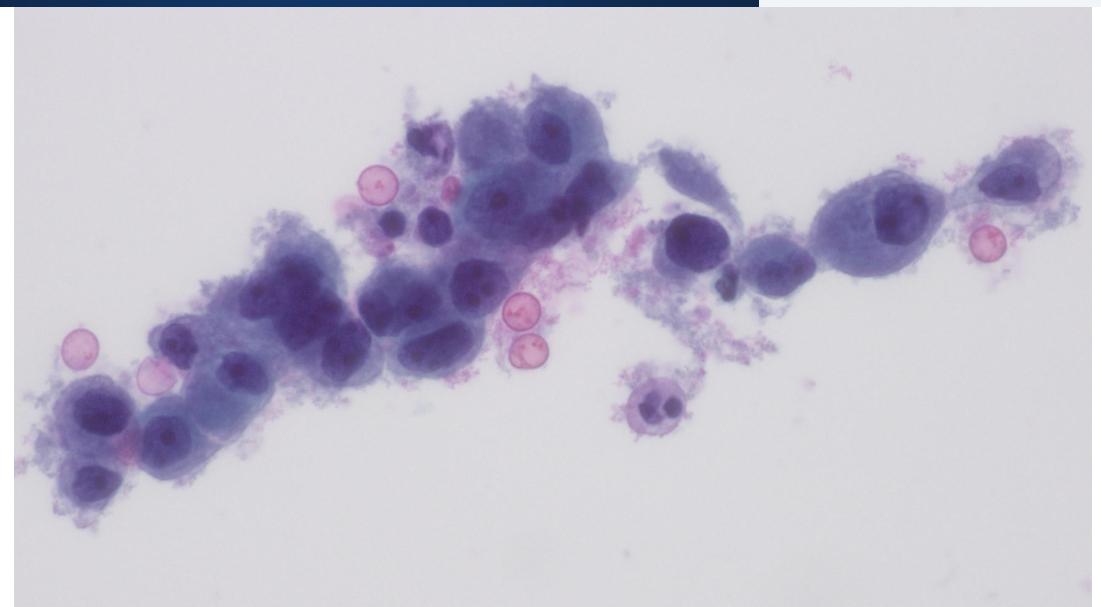






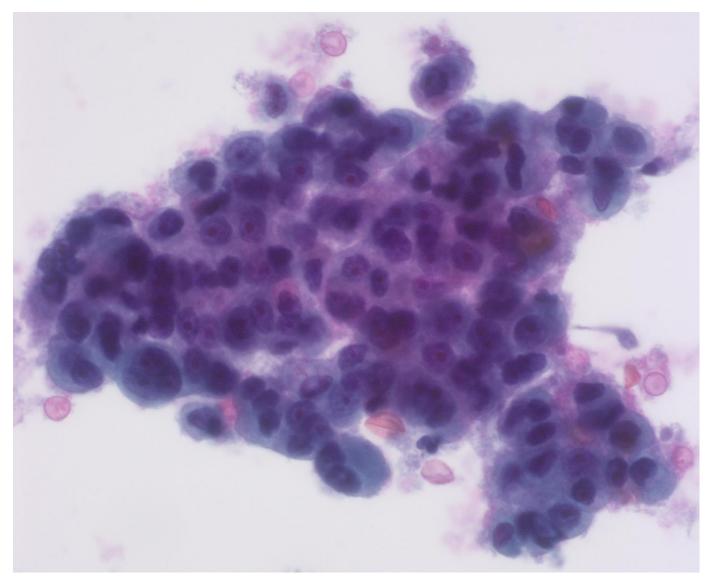
#### Prominent nucleoli

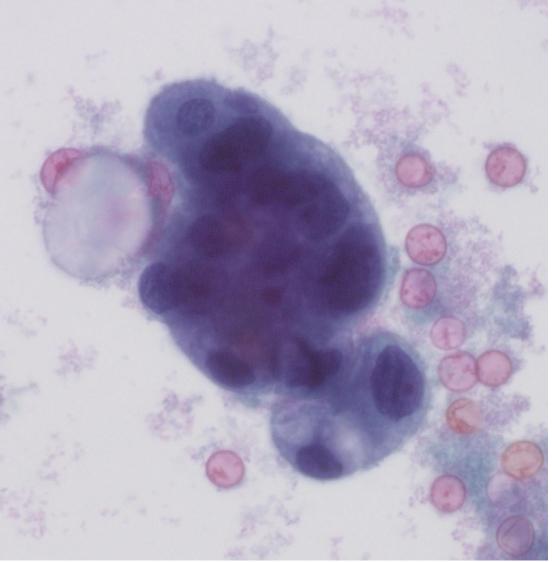




### Few larger aggregates of cells







#### Differential diagnosis?

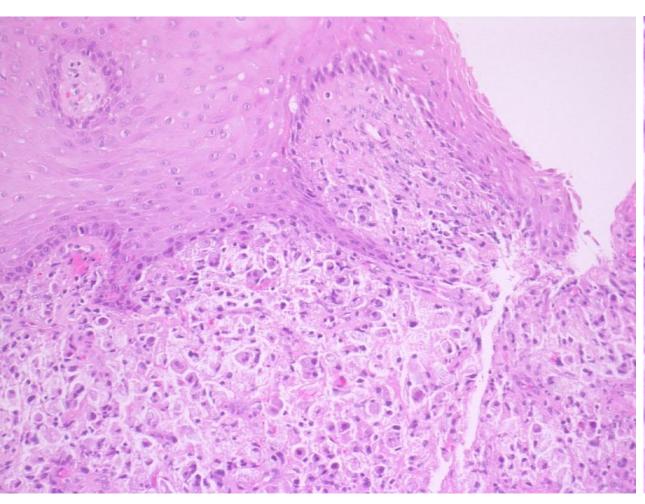


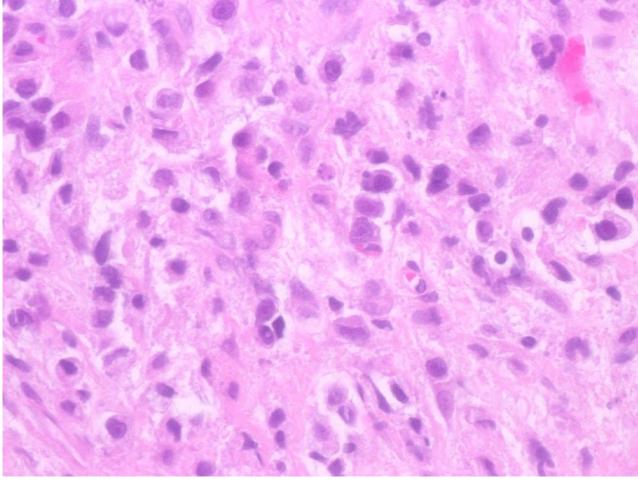
- Small cells
- High nucleus to cytoplasm ratio
- Enlarged nuclei
- Prominent nucleoli
- Vacuolated cytoplasm
- Diathesis

- Most common: Non-keratinizing squamous cell carcinoma
- Best fit for morphology: Adenocarcinoma with signet-like features

### Histology







#### Rectal adenocarcinoma



- The patient had developed adenocarcinoma in the rectum that directly extended to the vagina along the fistulous tract
- Metastasis could also be considered: lobular breast carcinoma or diffuse-type gastric adenocarcinoma could look similar

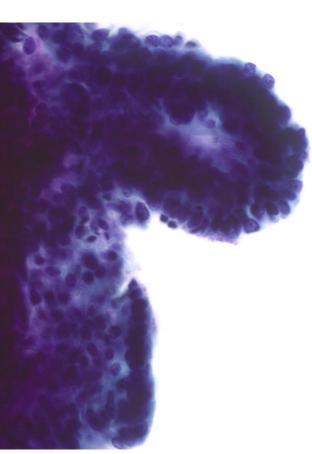
#### Case #1b

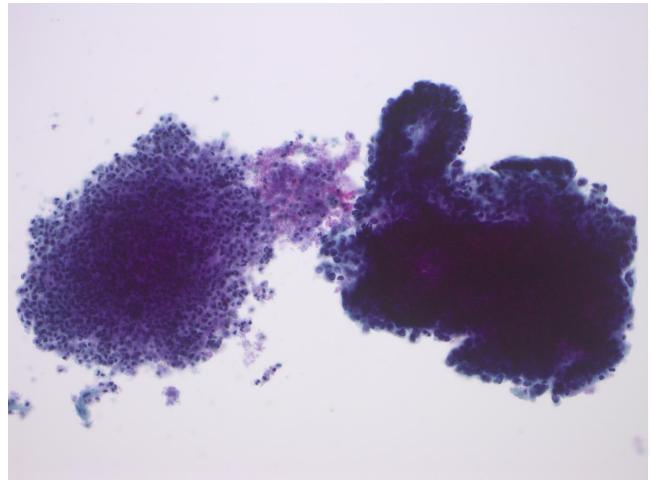


- 60 year old female
- Abnormal bleeding and discharge
- Rectal carcinoma with low anterior resection and excision of rectovaginal fistula
- Positive vaginal margin, now with recurrence

# Tumor and purulent debris



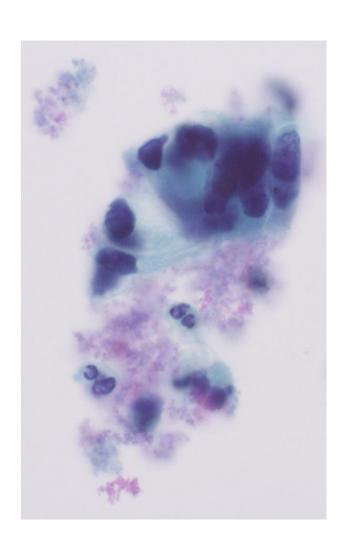


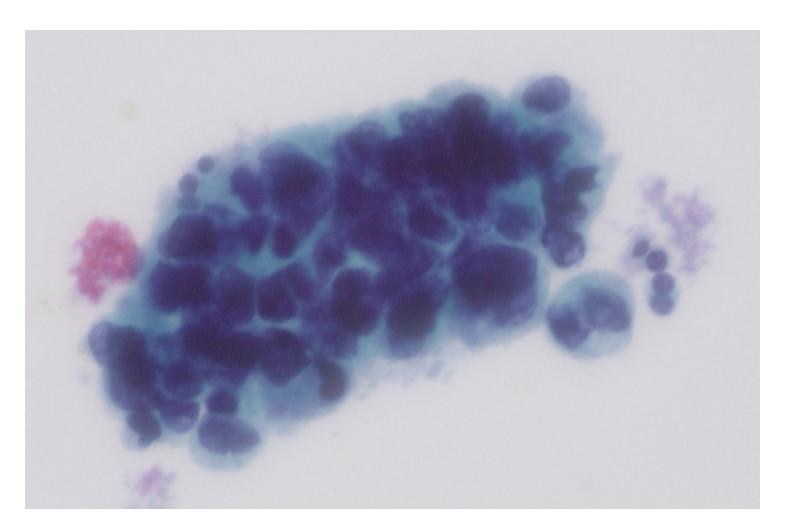




#### Smaller clusters of tumor cells

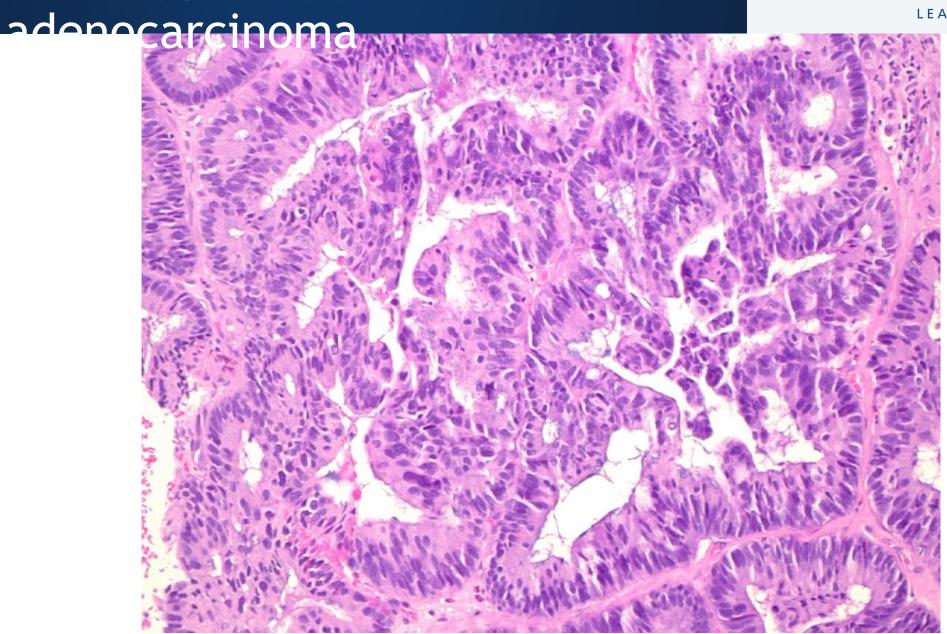






# Usual-type rectal





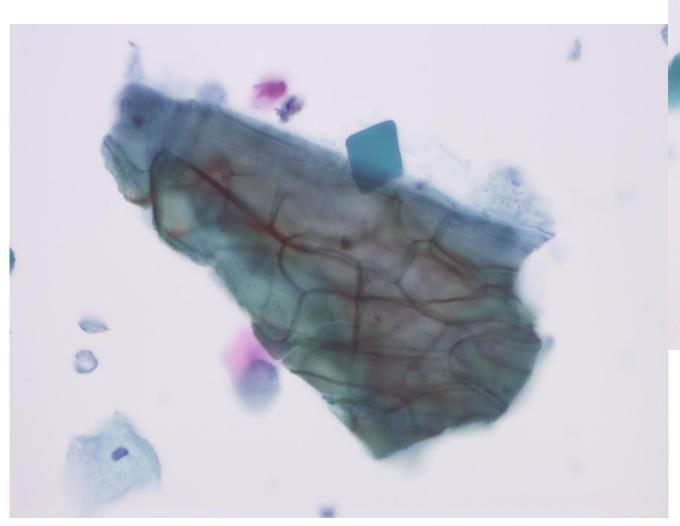
#### Case #1c

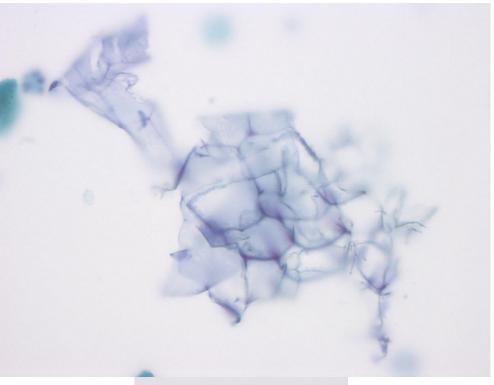


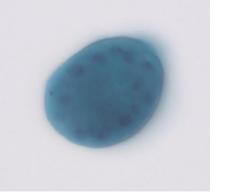
- 80 year old female
- In the emergency room with vaginal discharge
- History of endometrial carcinoma with hysterectomy and radiation

# Foreign material









#### Degenerated skeletal muscle

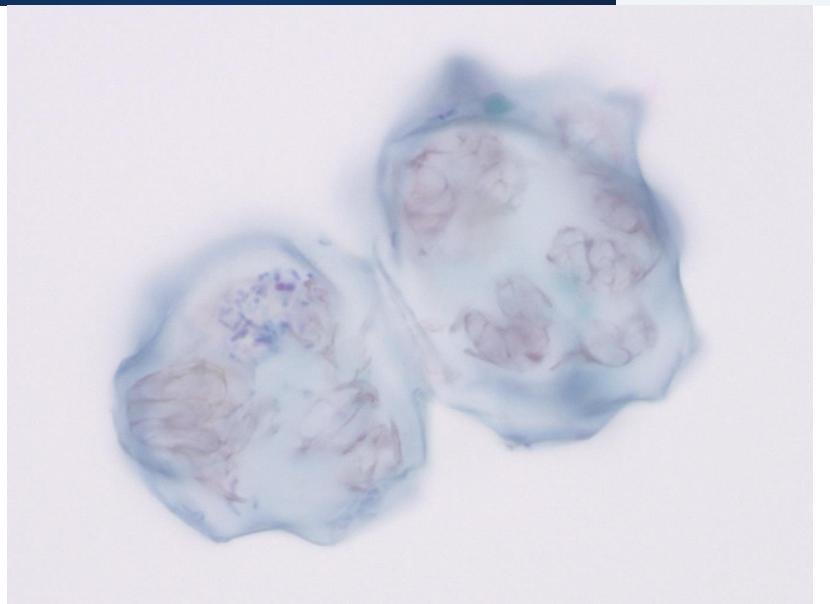






### Vegetable matter





#### Rectovaginal fistula



- Vegetable matter and skeletal muscle from a radiation-induced fistula
- No recurrence of malignancy identified

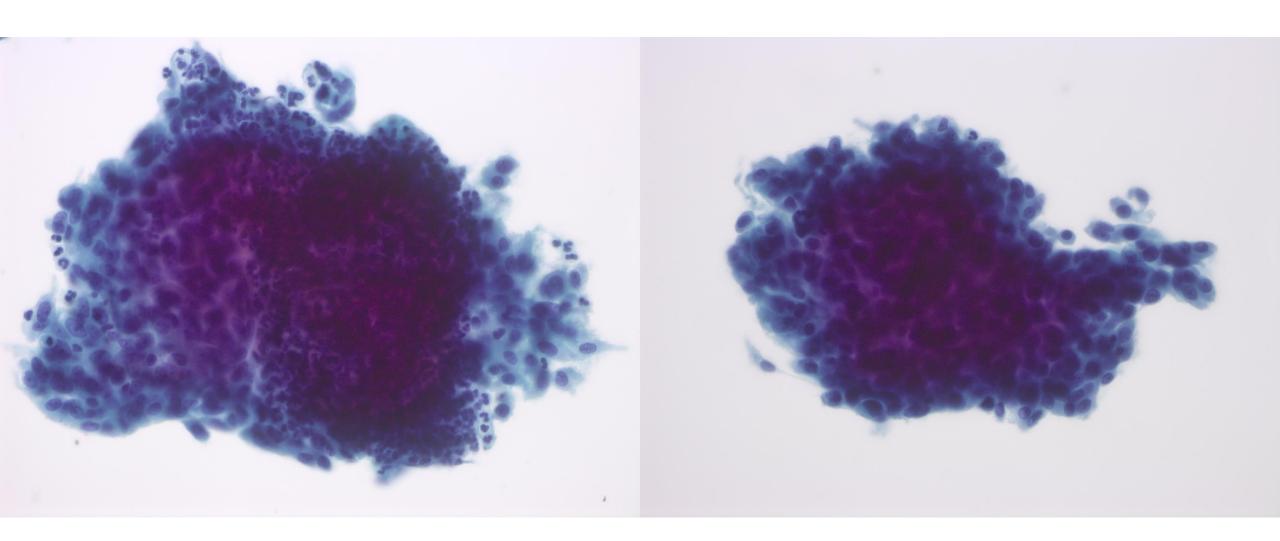
#### Case #2



- 73 year old female
- HPV negative
- Bleeding and discharge

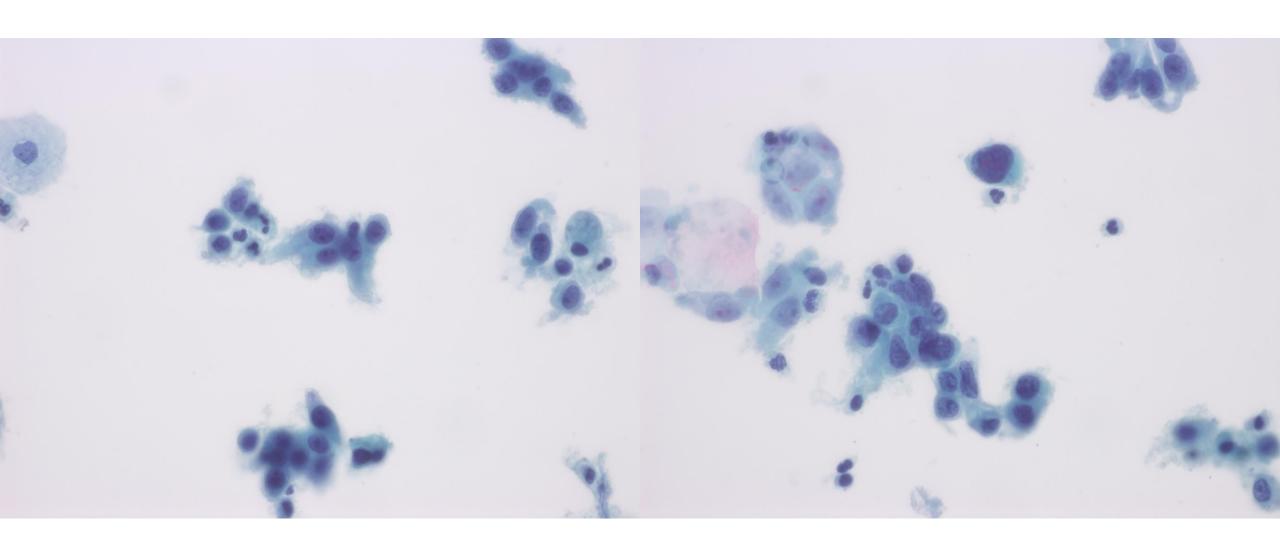
# Large aggregates of malignant





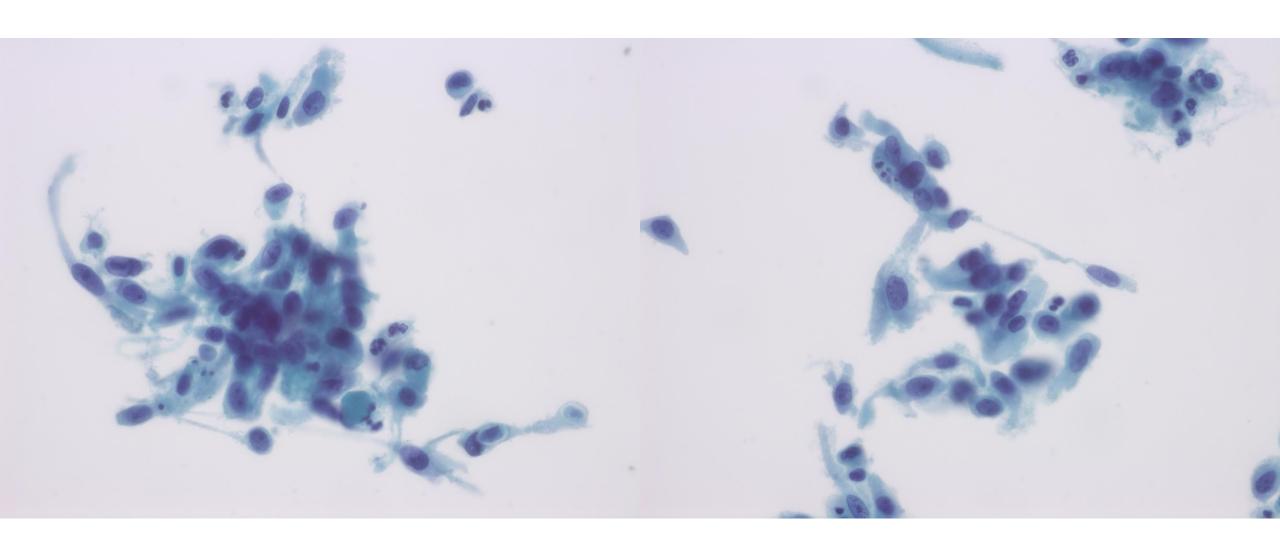
### Large dark nuclei with nucleoli





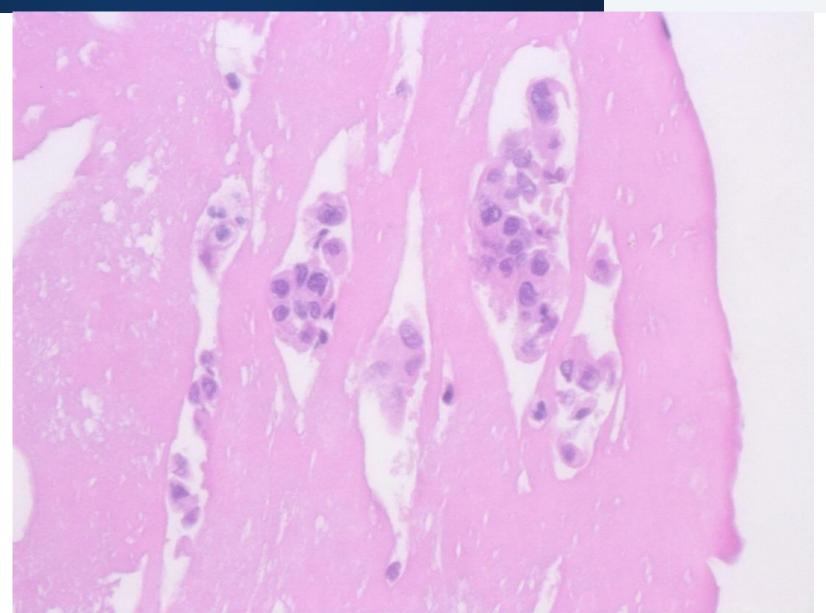
### Prominent cytoplasmic tails





### Vaginal biopsy - p16 negative





#### Differential diagnosis

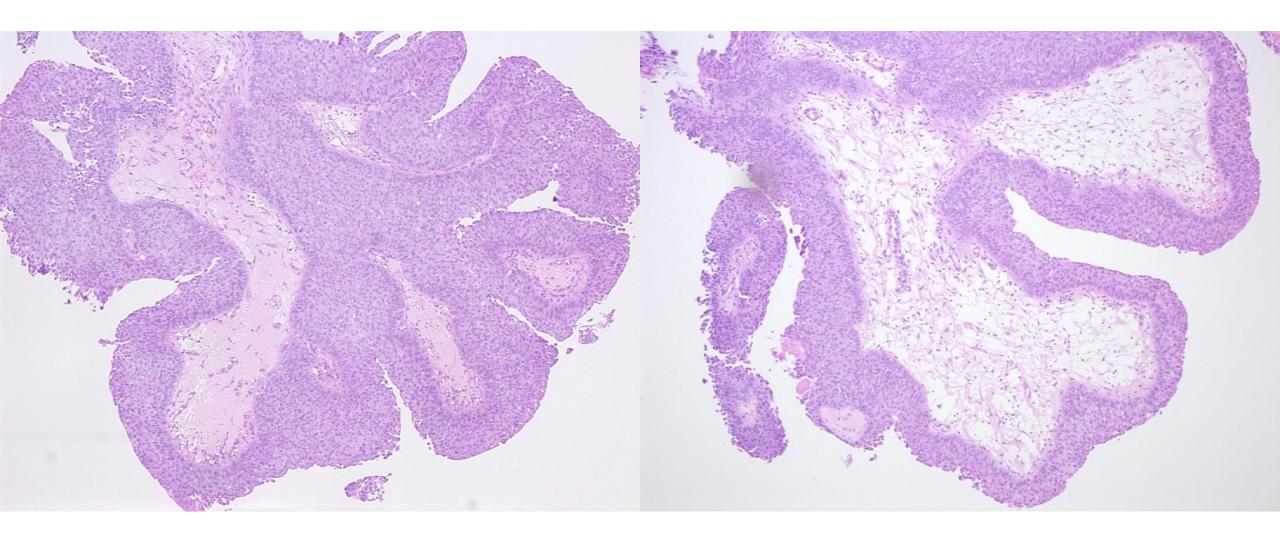


- "Squamoid" malignant cells
- Nuclear pleomorphism
- Dark, clumpy chromatin
- Engulfment of neutrophils
- Most common: Squamous cell carcinoma
- Another relatively common possibility: Endometrial carcinoma with squamous/squamoid appearance
- Also consider: Extrauterine carcinoma

# Bladder biopsy from 2 years



#### garlier



#### High grade urothelial carcinoma



- The patient had a bladder carcinoma that directly extended into the vagina
- The "squamoid" cells are better thought of as "cercariform" cells once the diagnosis is known

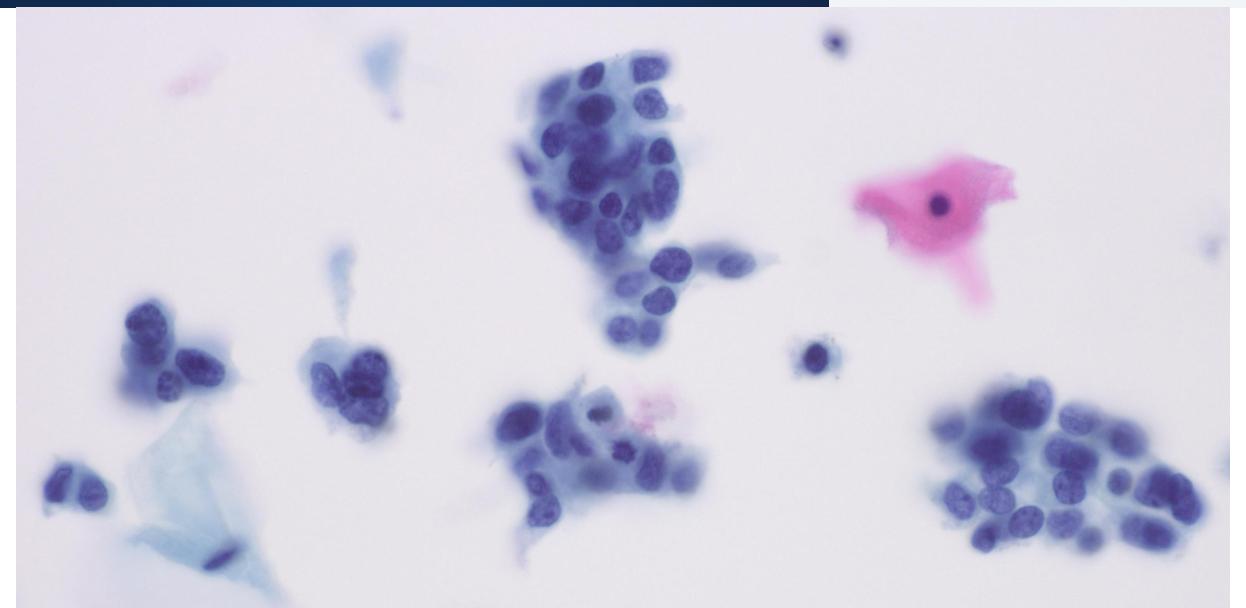
#### Case #3



- 40 year old female
- Vaginal bleeding
- LEEP for HSIL 4 years ago
- Lost to follow-up after LEEP

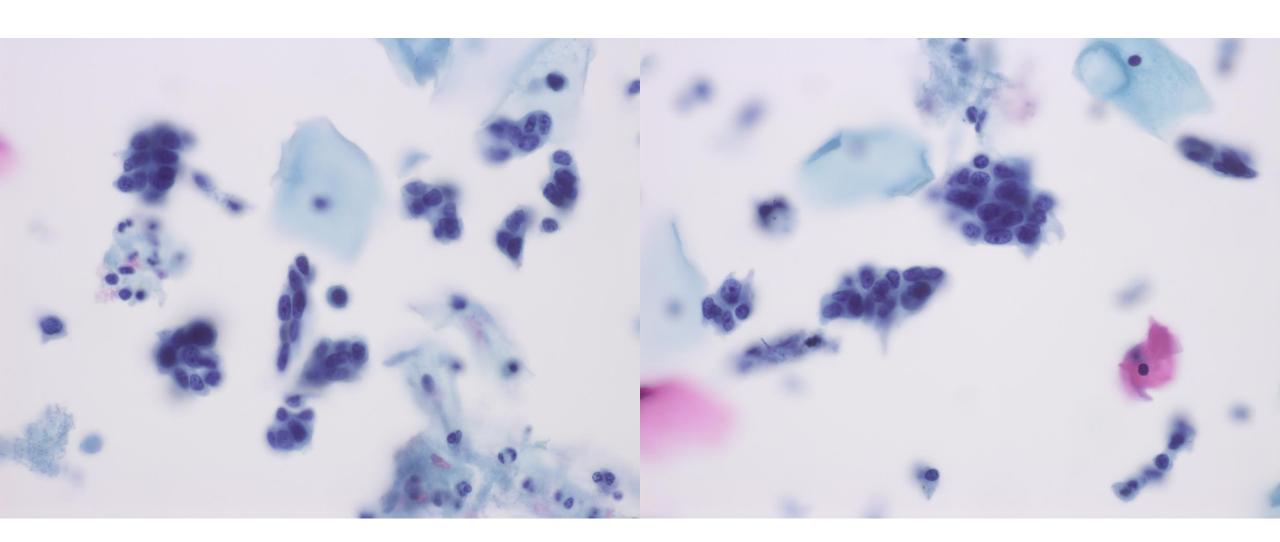
### Pleomorphic nuclei with mitosis





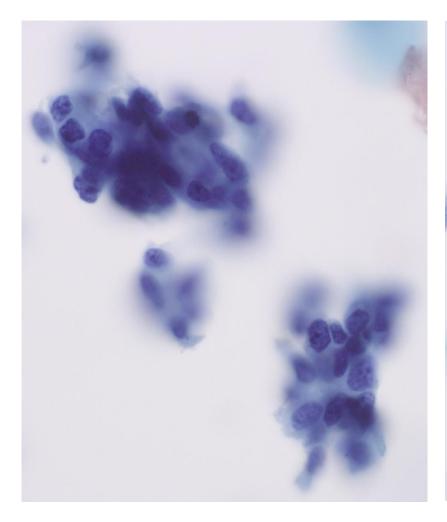
### High nucleus to cytoplasm ratio

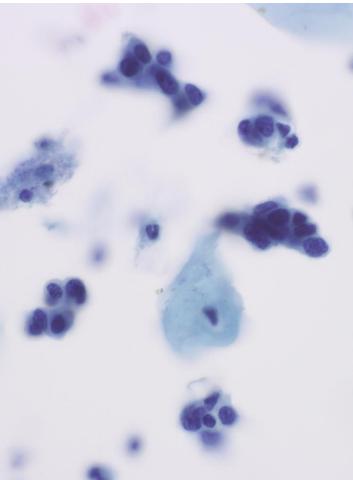


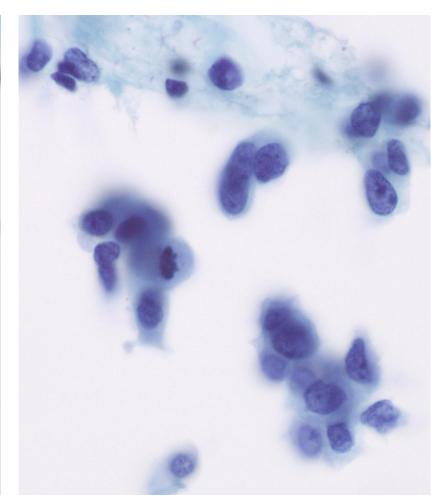


#### Dark nuclei



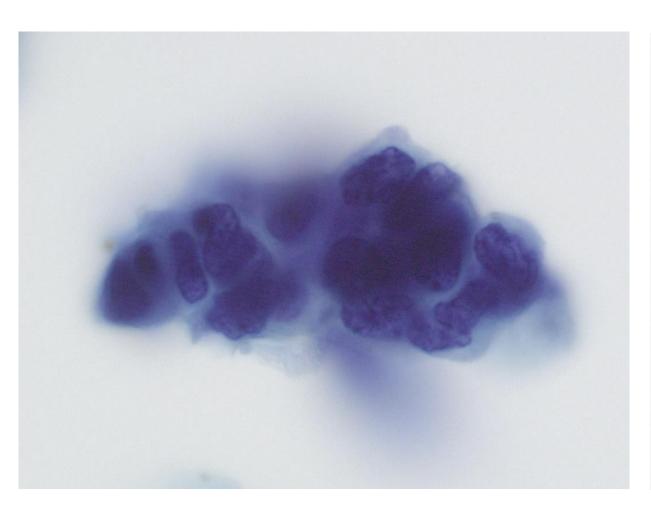


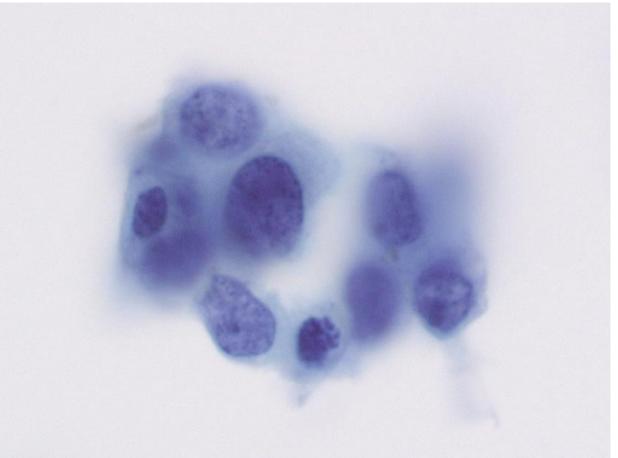




### Clumpy chromatin

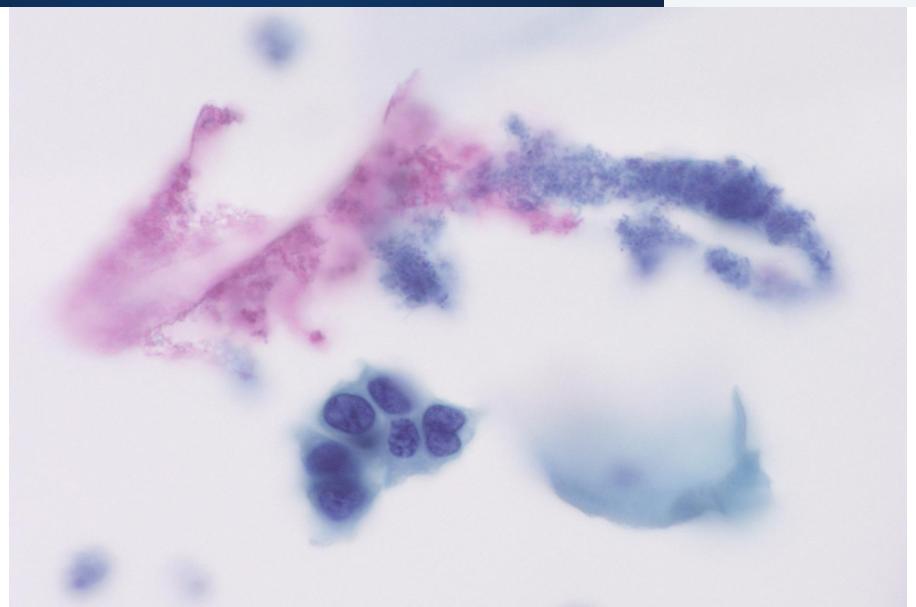






#### Diathesis





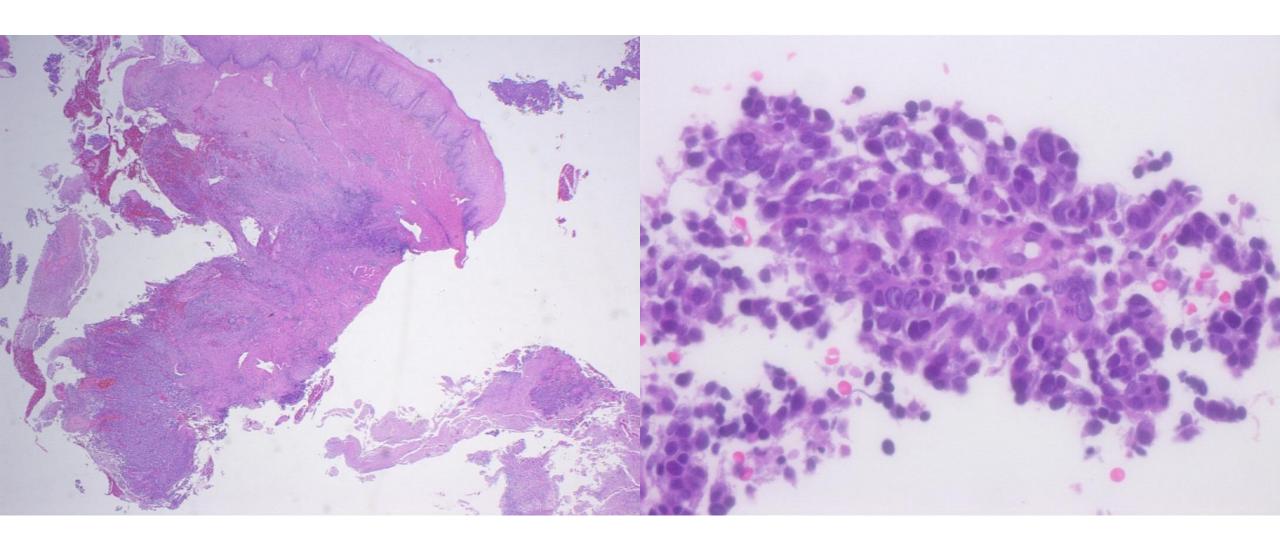
#### Differential diagnosis



- High nucleus to cytoplasm ratio cells
- Nuclear contour irregularities and pleomorphism
- Clumpy chromatin
- No obvious nucleoli
- Vaguely rosette-like architecture focally
- Most common: Squamous cell carcinoma
- Another possibility: Adenocarcinoma in situ
- Something else to think about: Menstrual endometrium
- History of SIL now with aggressive cancer: Small cell carcinoma

### Cervical biopsy - p63- and CD56+





#### Small cell carcinoma

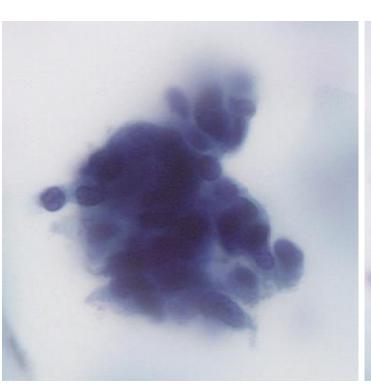


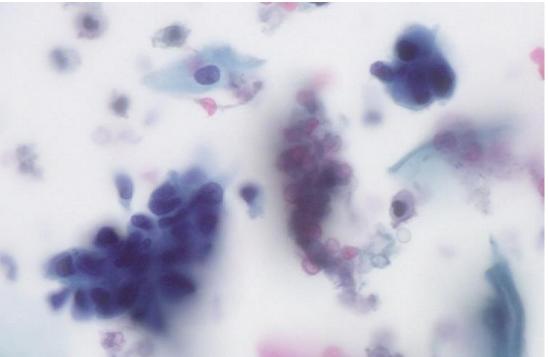
- Small cell carcinoma is rare as a cervical primary
- It is associated with HPV (types 18 and 16)
- May have a previous history of HPV+ or SIL
- Highly aggressive and usually fatal
- May be difficult to distinguish from metastasis
  - -Younger age favors cervical primary
  - -HPV testing of the tumor may be helpful

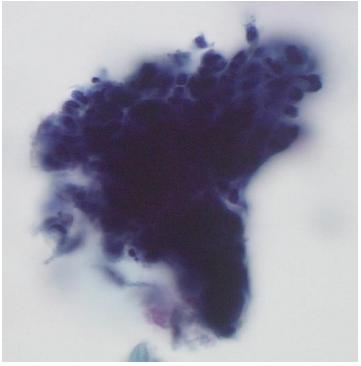
#### Case #3b - menstrual

#### andometrium









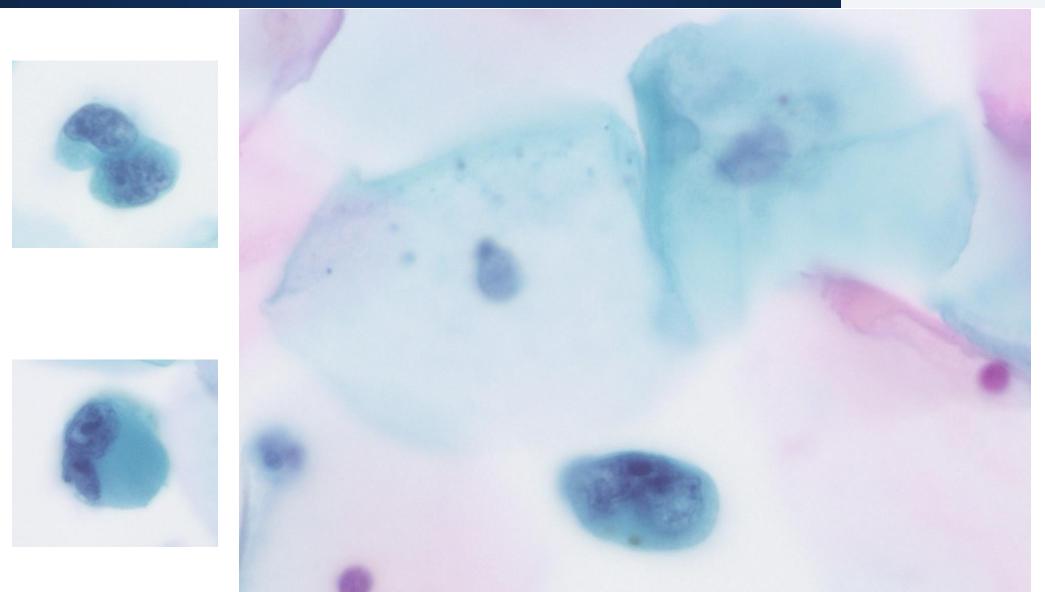
#### Case #4

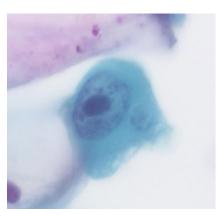


- 62 year old female
- Cervical mass

### Isolated malignant cells



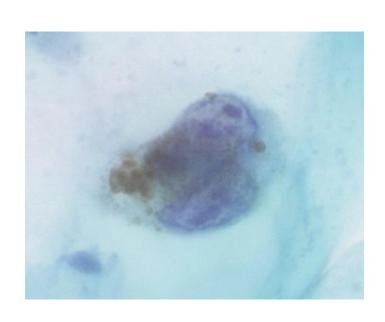


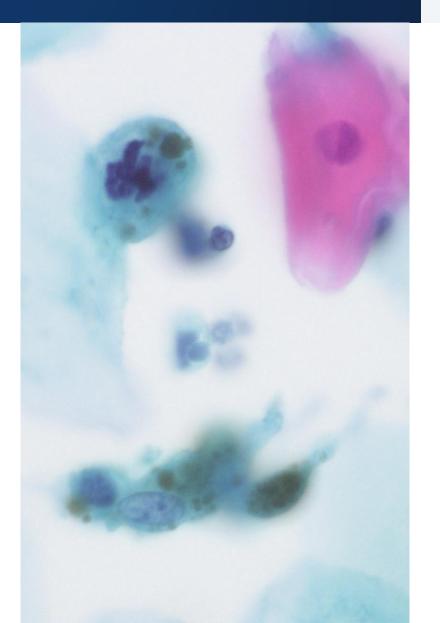


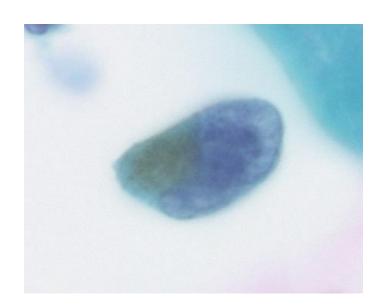


# Cytoplasmic pigment



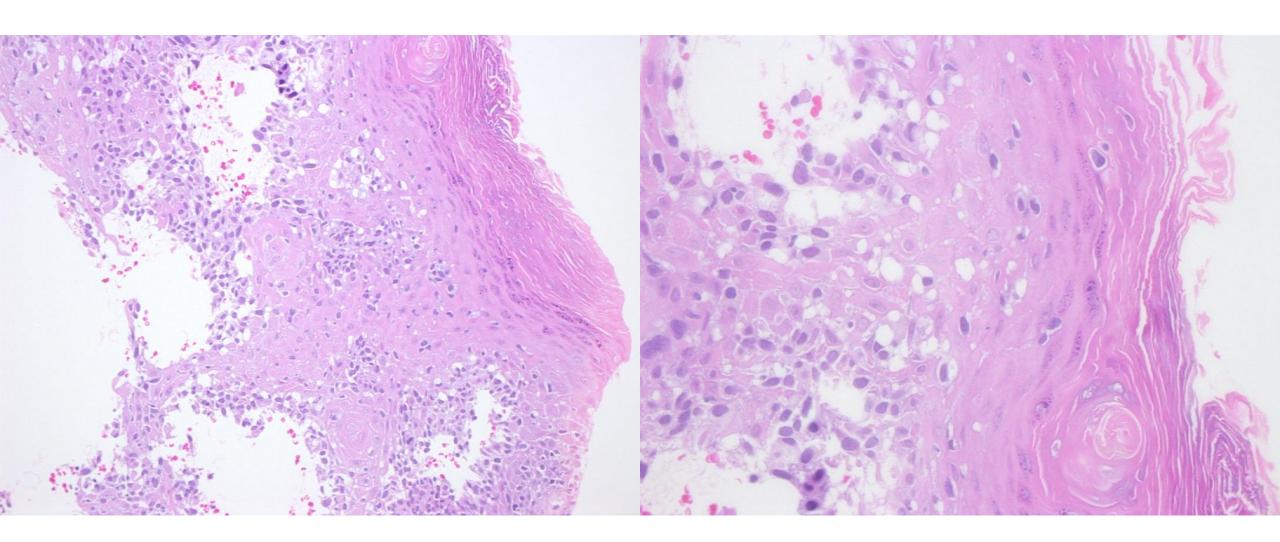






# Cervical biopsy





#### Melanoma



- The patient had a history of melanoma in situ of the vulva
- The disease spread to the vagina and cervix and became deeply invasive in the cervix
- Primary melanoma of the cervix is rare
- Pap tests may rarely detect vulvar melanoma
- Metastatic melanoma to the gynecologic tract may occur

