

Interesting case conference

2/11/13

Clinical Data:

- 30-year-old female who approximately one year ago stopped menstruating
- Began to notice increased acne and facial hair as well as proximal muscle weakness and increased abdominal girth. She noted that her extremities became thinner and her trunk became larger in size consistent with findings of Cushing's syndrome
- Began to have abdominal and back pain mainly on the right side. She underwent imaging which revealed an approximate 13-14 centimeter right adrenal mass with significant retroperitoneal lymphadenopathy. Adrenal mass appeared to be pressing on the vena cava; the vena cava was slit-like

PLAN:

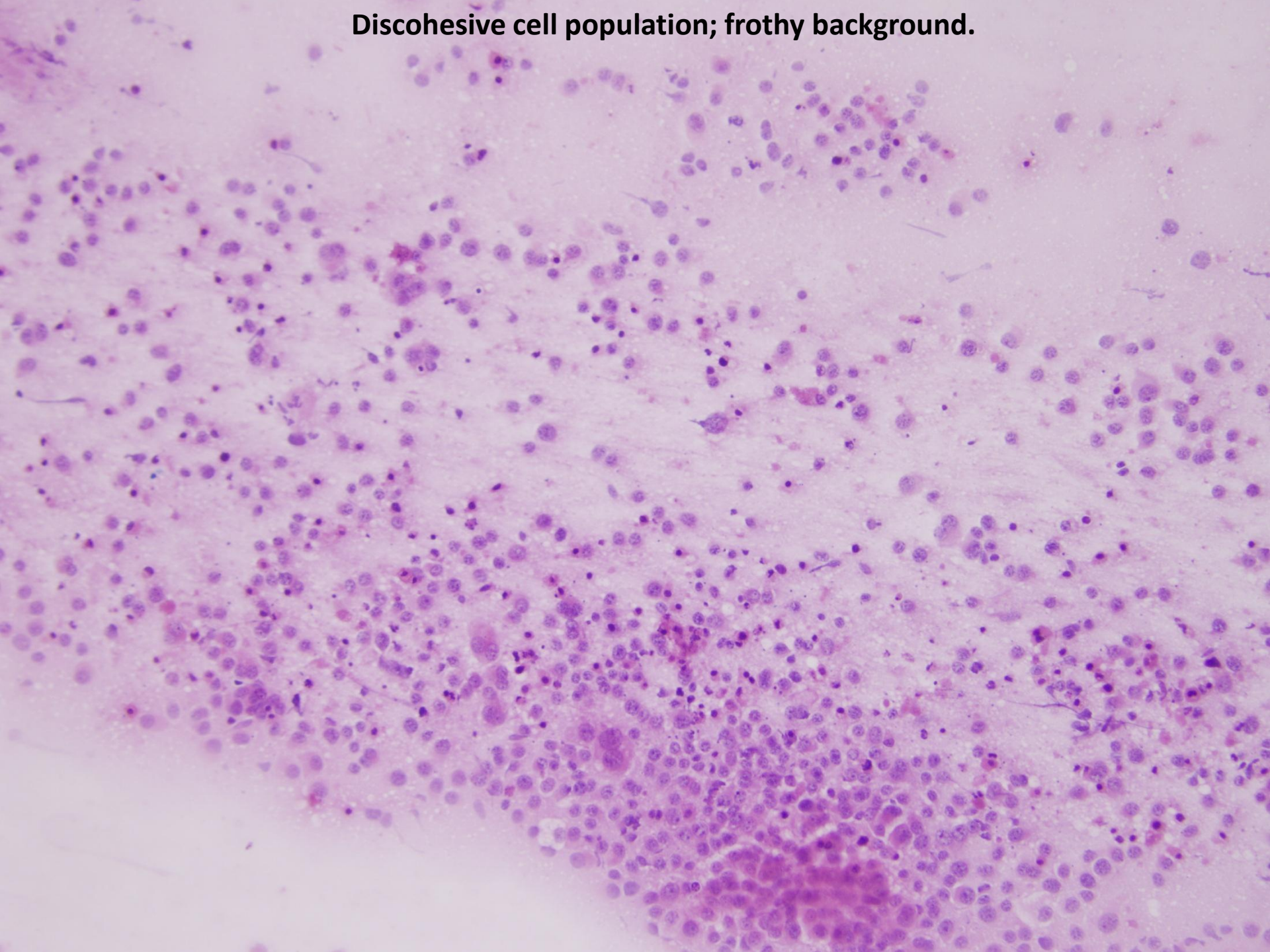
- Diagnostic laparoscopy to assess for peritoneal studding, if peritoneal studding=> abort operation
- If no peritoneal studding=>would aspirate fluid near the liver and down in the pelvis to assess for cytologic evidence of malignant cells. If positive=> would terminate operation
- If cytology was negative, would do a frozen section on pericaval lymph nodes to assess for low-grade versus high-grade tumor. If tumor high grade=> would terminate operation. If tumor low grade=> would assess rest of the lymphadenopathy for possibility of a full resection

INTRAOPERATIVE CYTOLOGY (2 Diff Quik slides)=> **NEGATIVE**

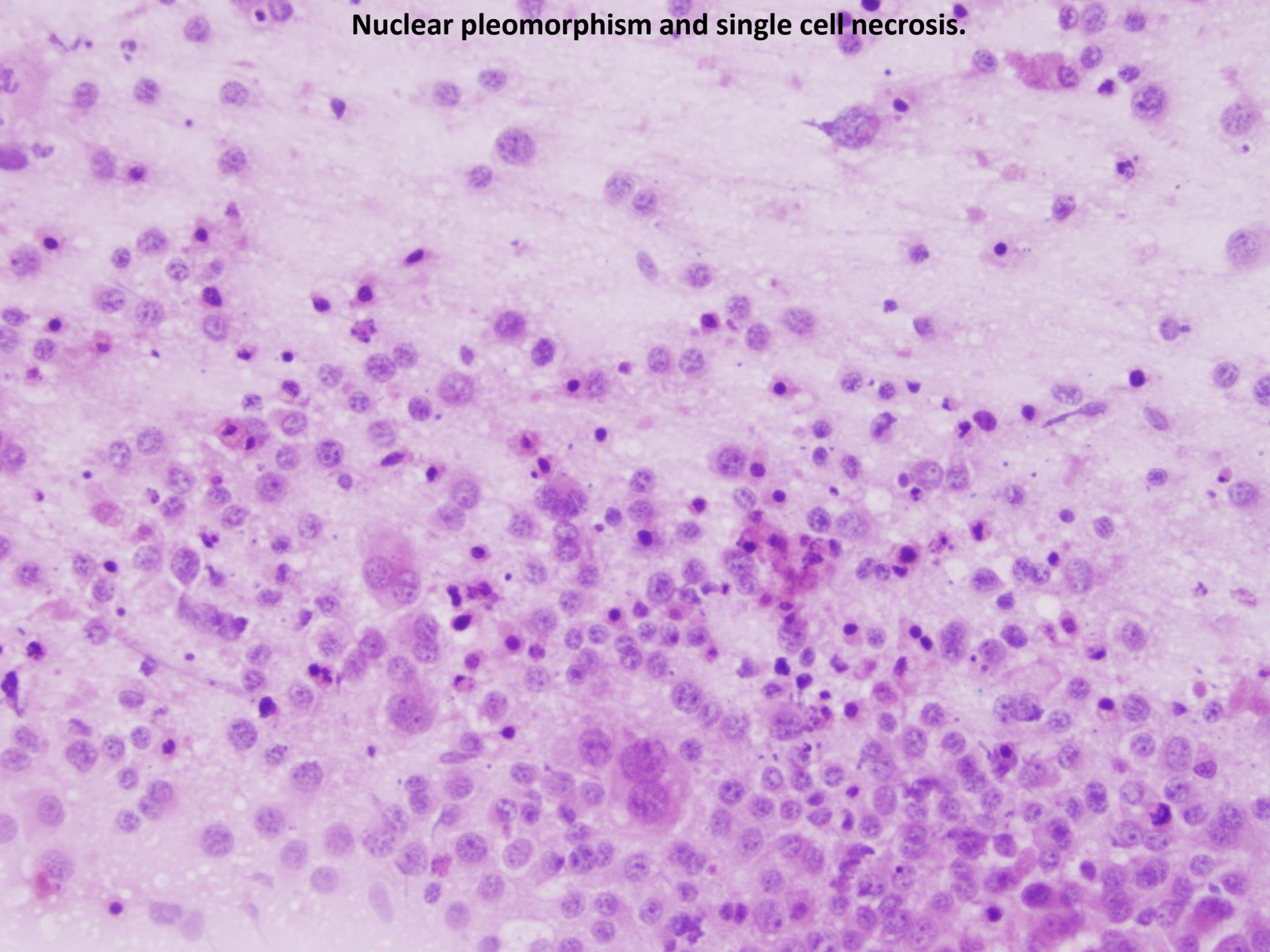
FROZEN SECTION REQUESTED

Scrape smears prepared during frozen section consultation.

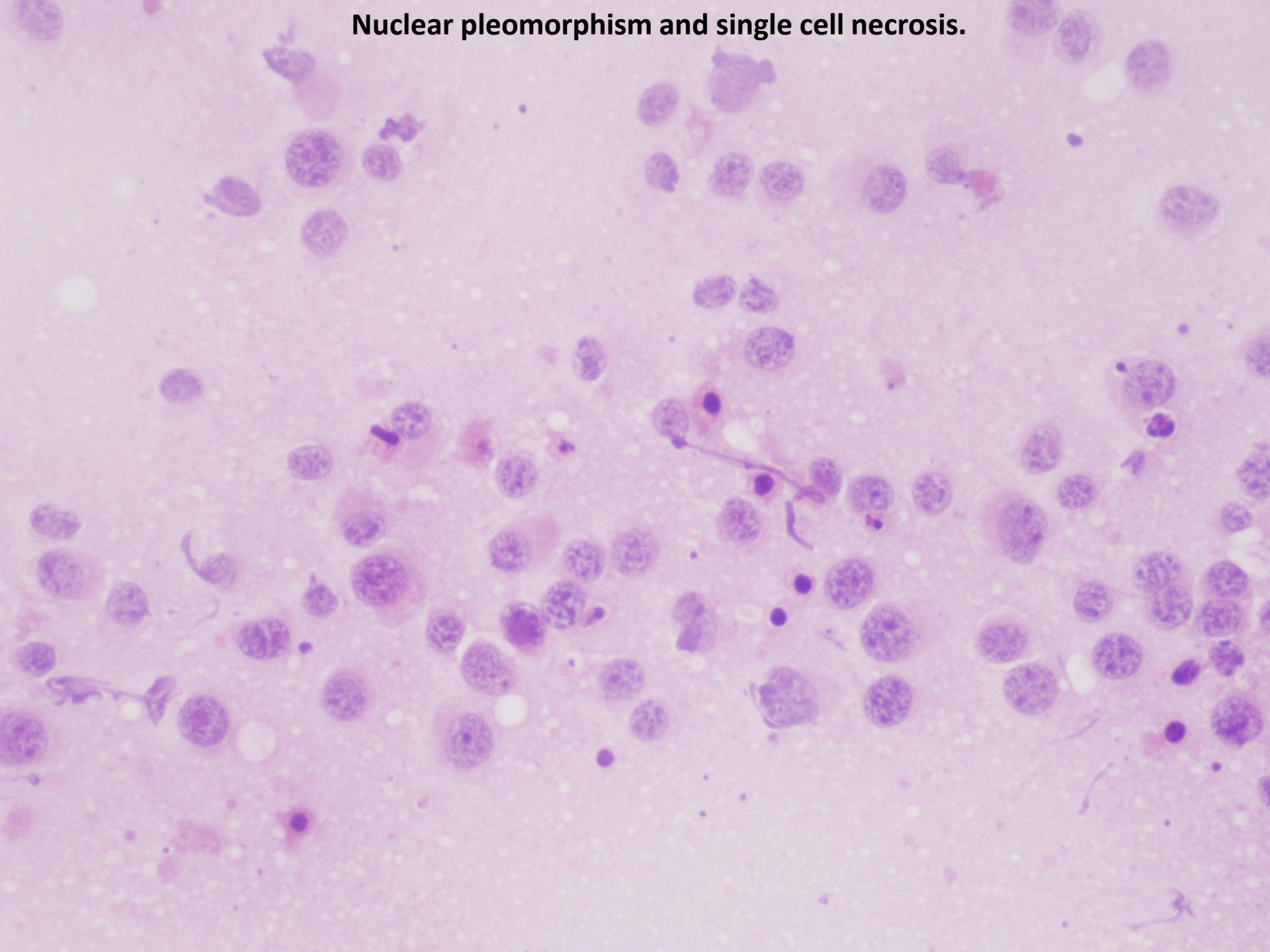
Discohesive cell population; frothy background.



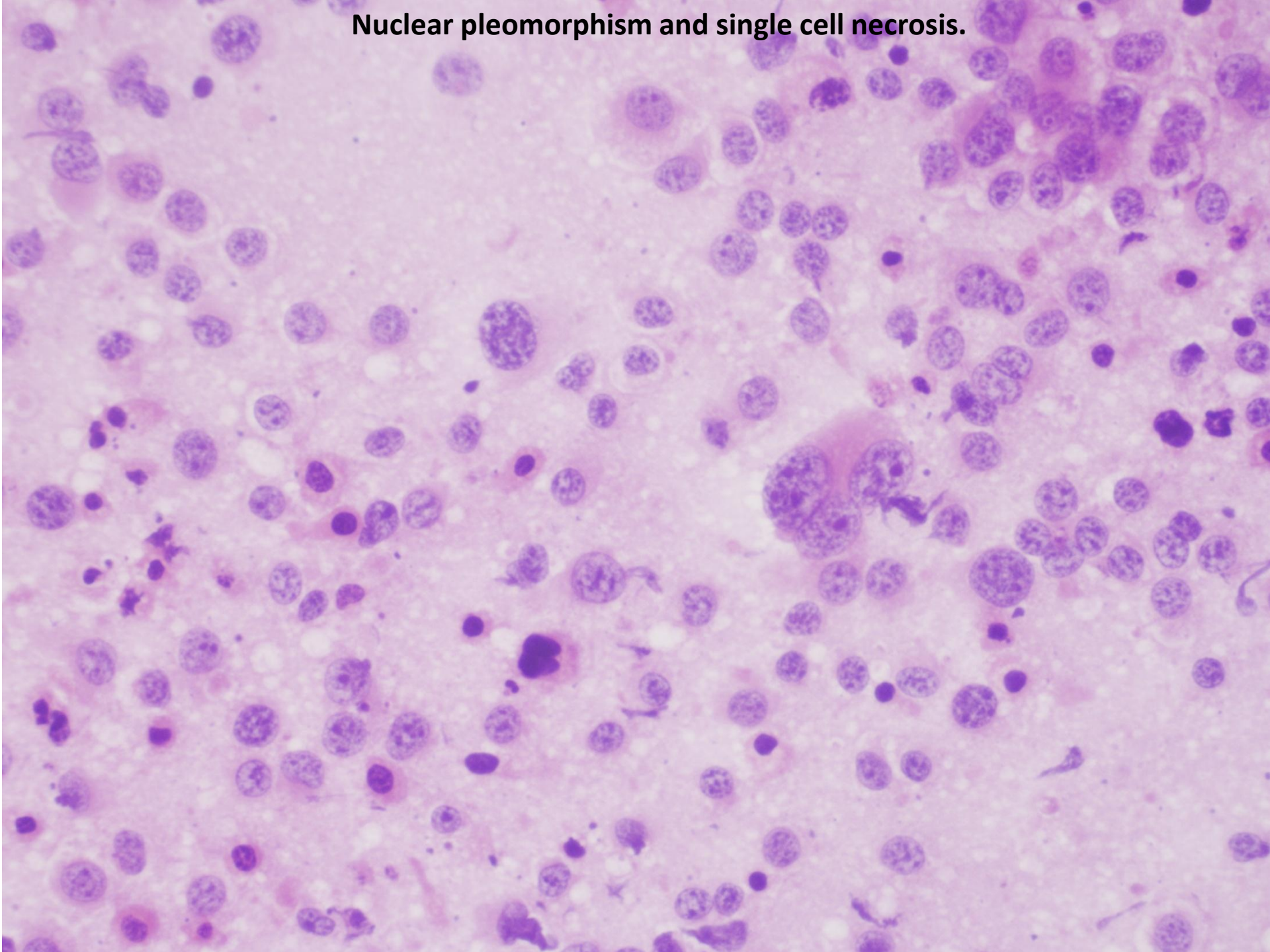
Nuclear pleomorphism and single cell necrosis.



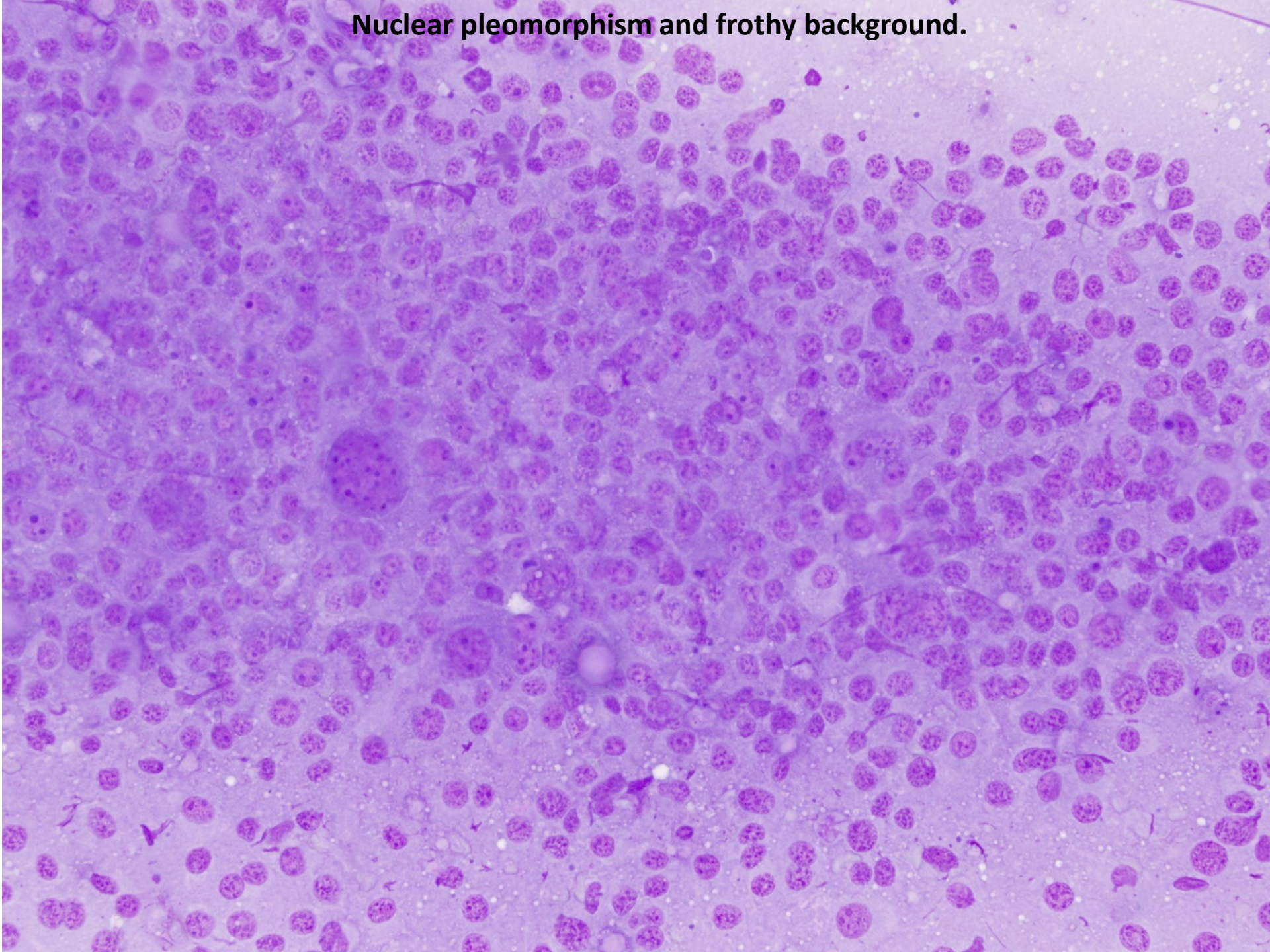
Nuclear pleomorphism and single cell necrosis.



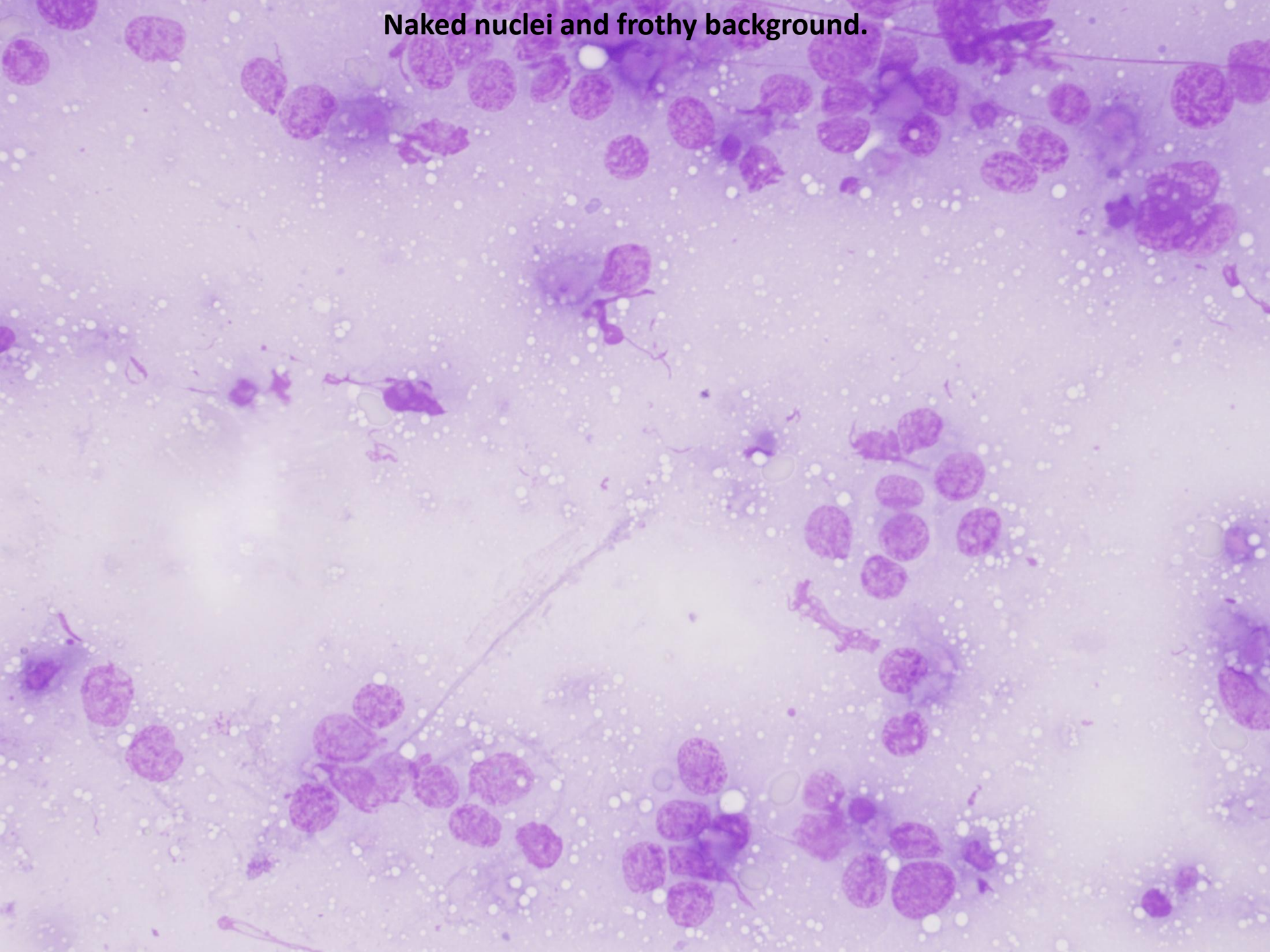
Nuclear pleomorphism and single cell necrosis.



Nuclear pleomorphism and frothy background.



Naked nuclei and frothy background.



**Final Diagnosis (Surgical Pathology):
Adrenal cortical carcinoma.**

Summary of Adrenal Cortical Carcinoma - Cytology

- Numerous isolated cells with intact cytoplasm
 - Granular or vacuolated cytoplasm
 - Enlarged and pleomorphic nuclei
 - Mitoses and necrotic debris
-
- Melan-A immunocytochemistry can be helpful in confirming the diagnosis.