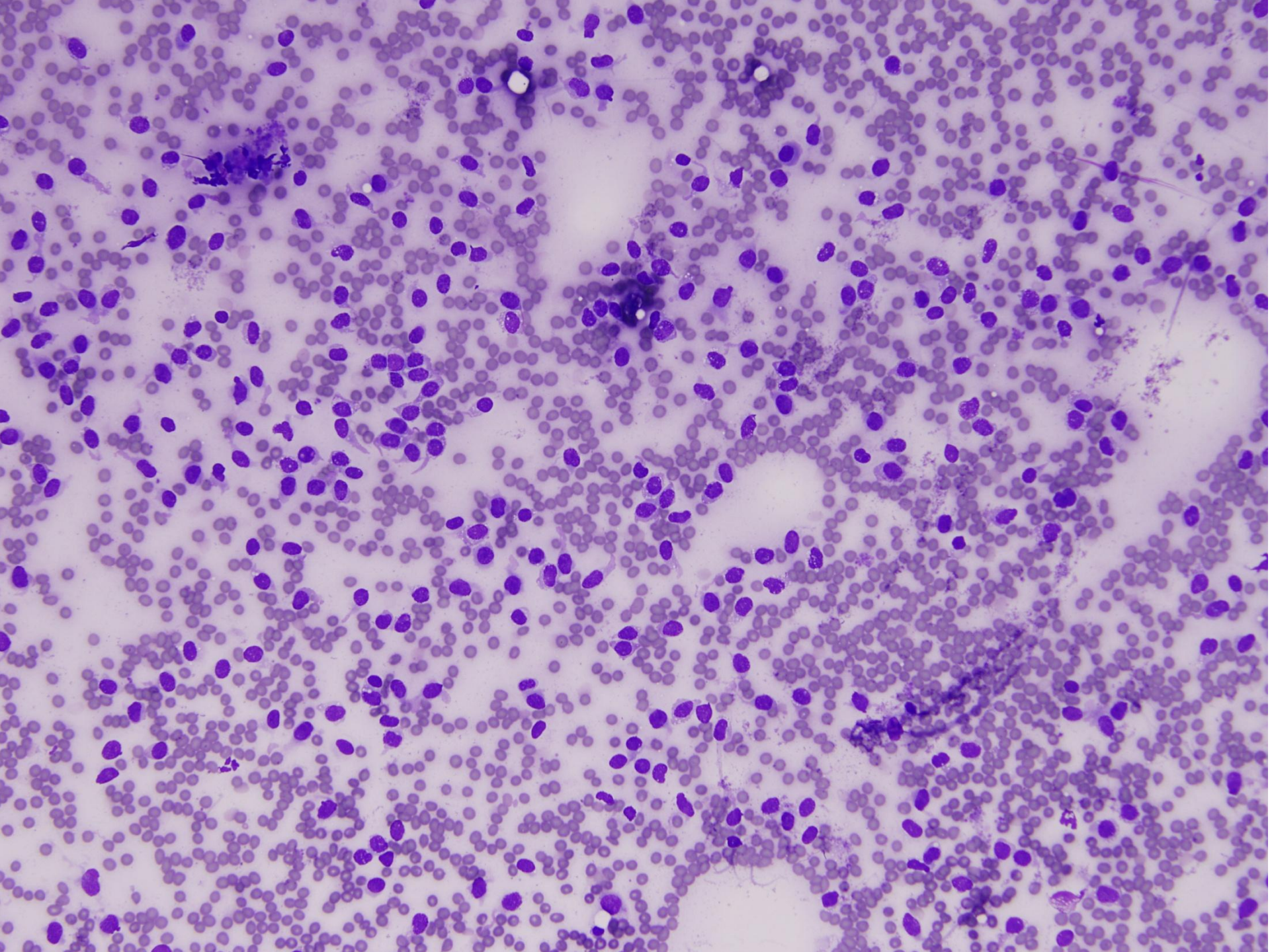


# Interesting case conference

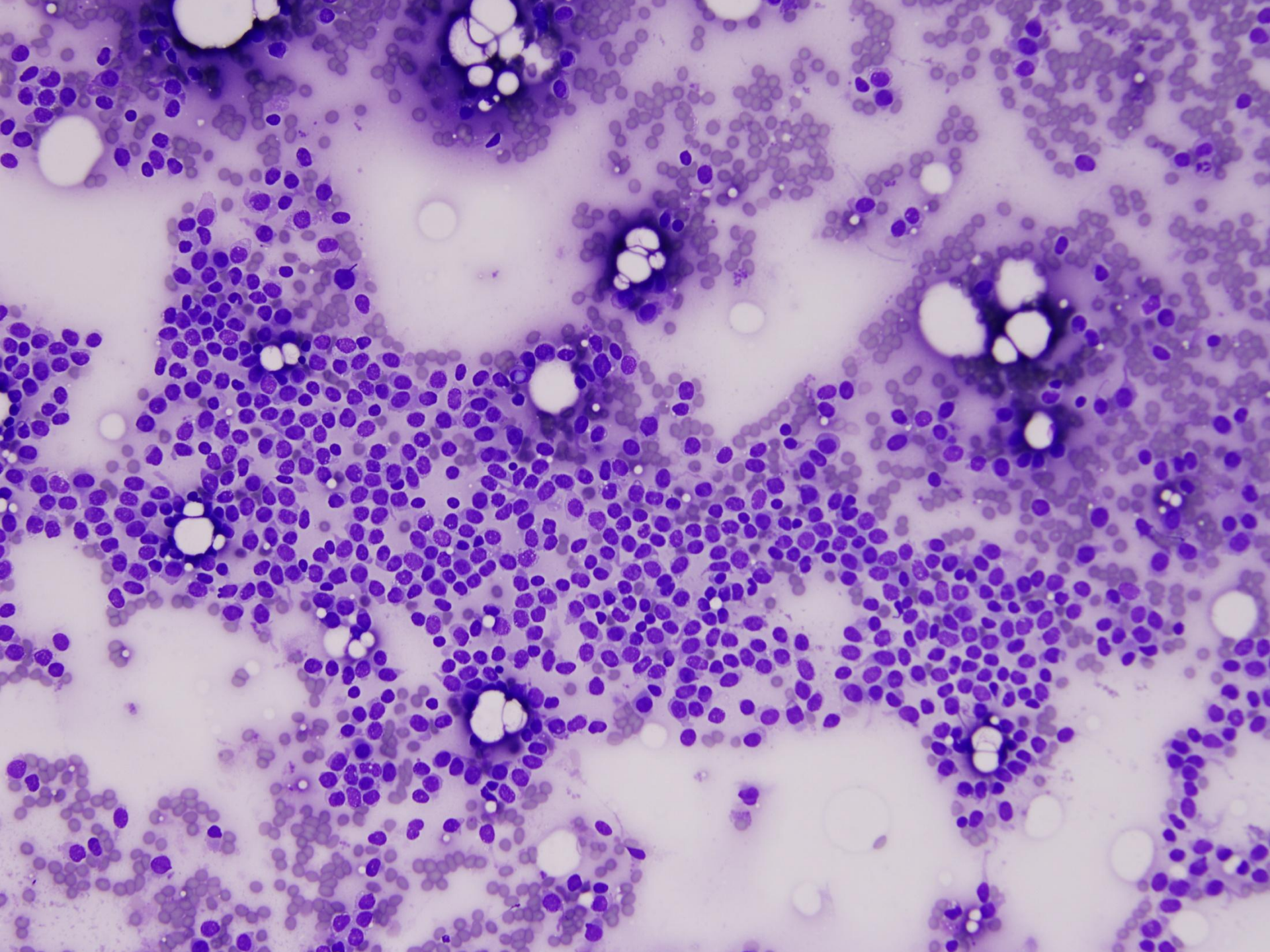
3/18/13

## Clinical Data:

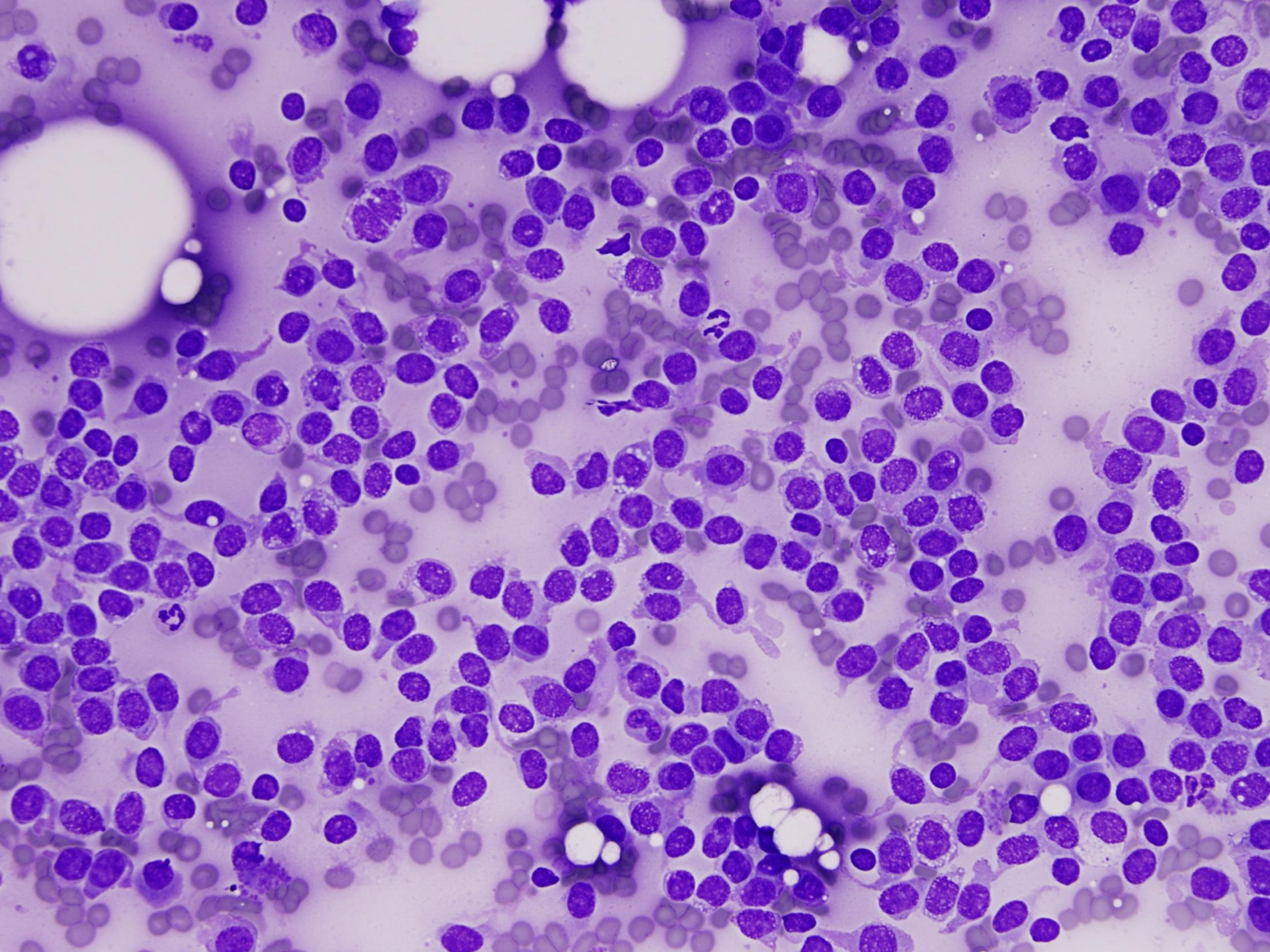
- 85 y.o. female developed bilateral neck masses November 2010, originally thought to be ptotic submandibular glands, but continued to grow
- FNA performed in November 2011 revealed bilateral low grade neoplasms
- Elevated calcitonin level of 19.9
- Ultrasound guided core needle biopsy was performed in March 2012
- She states that other than these neck masses that have been slow growing, she has noticed more fullness in her voice over the past 6 months



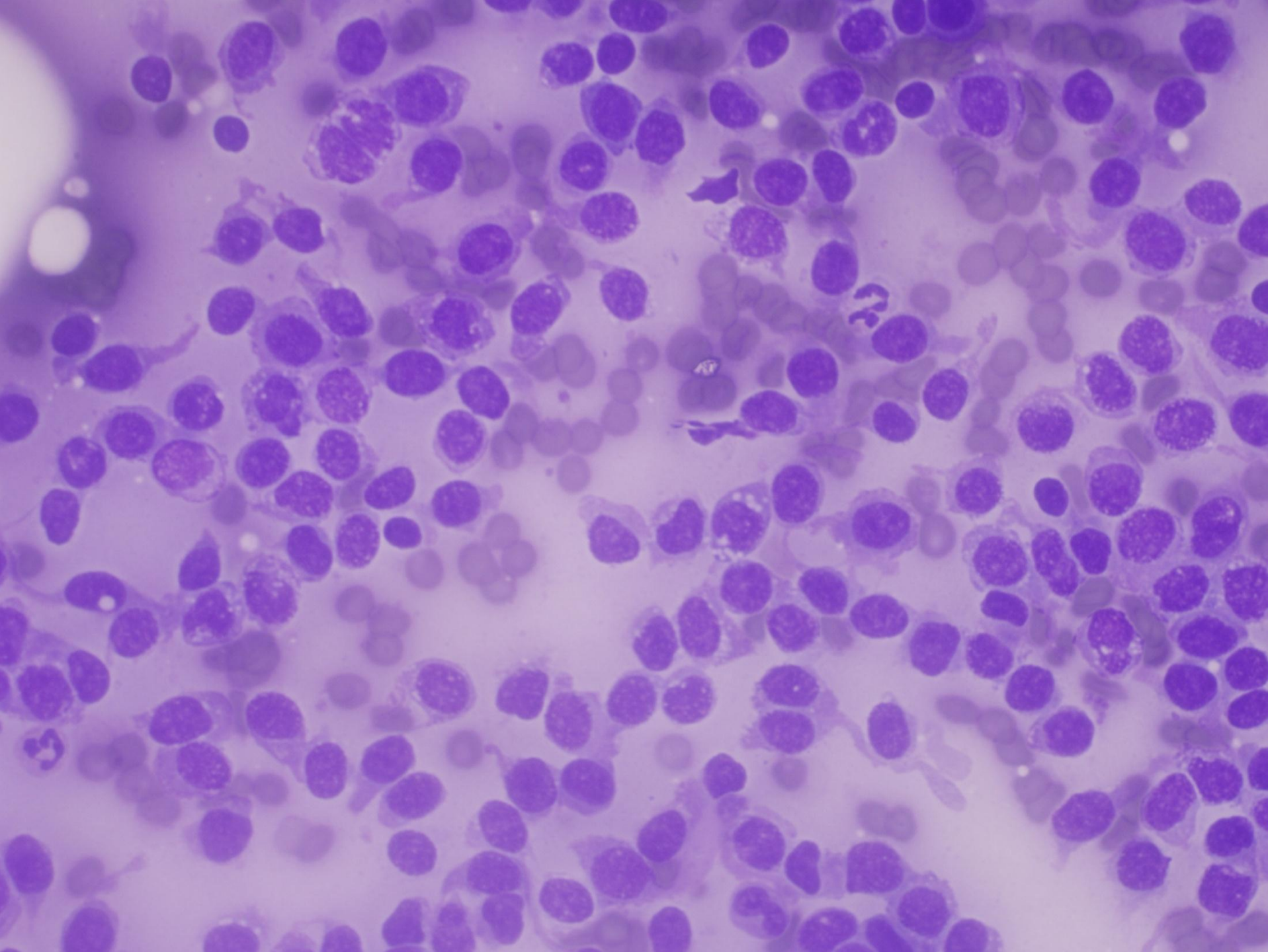


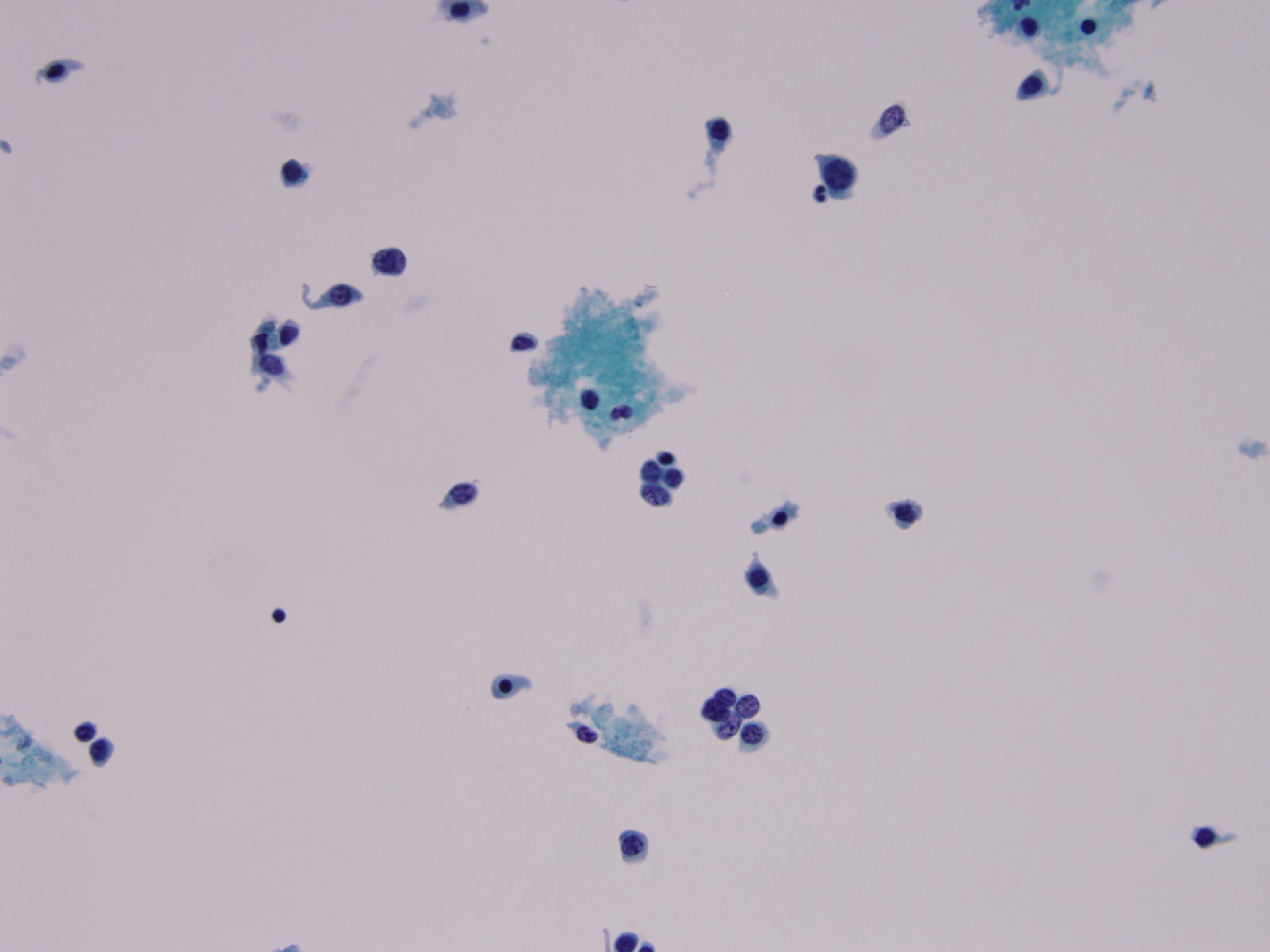


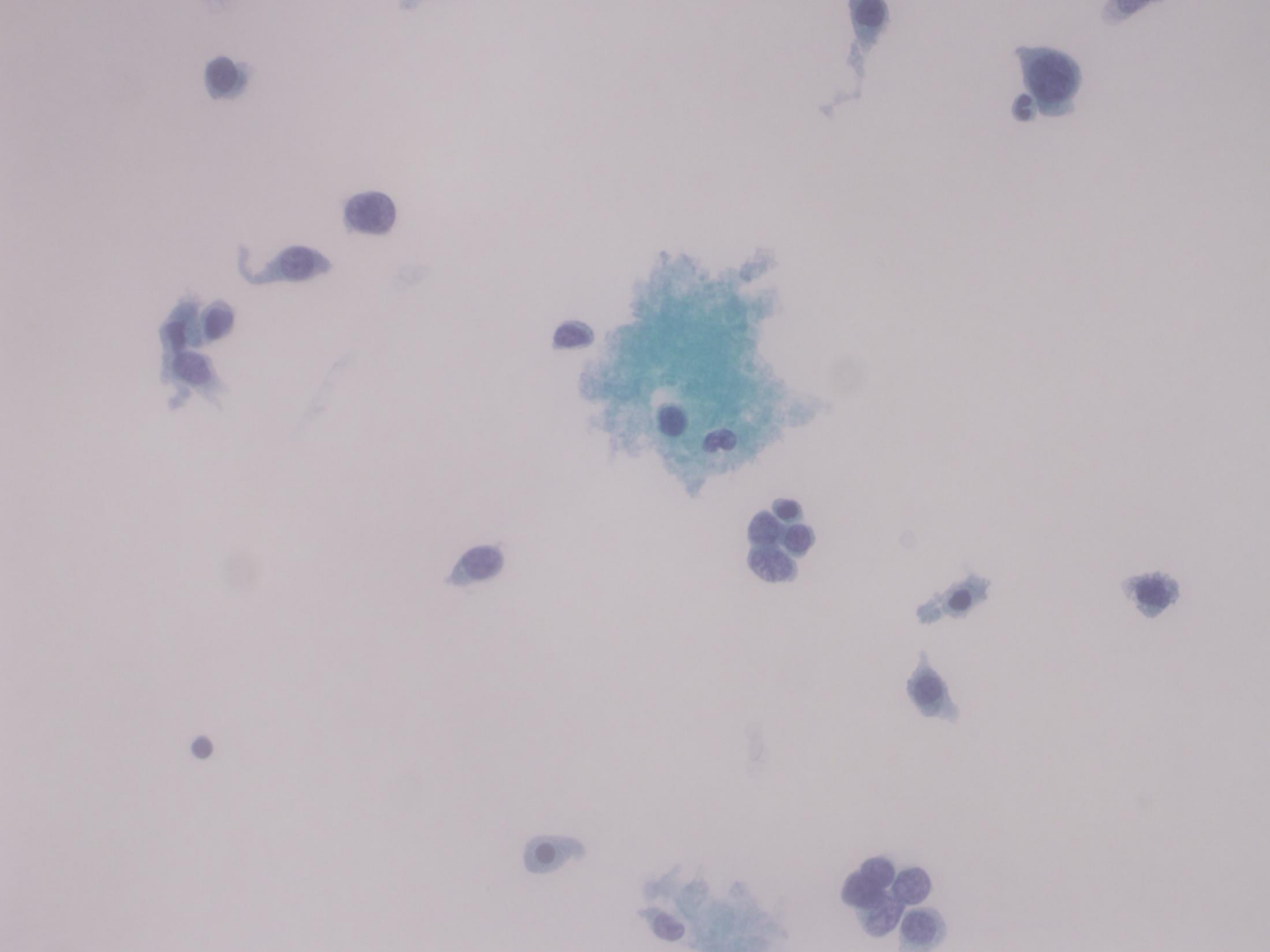




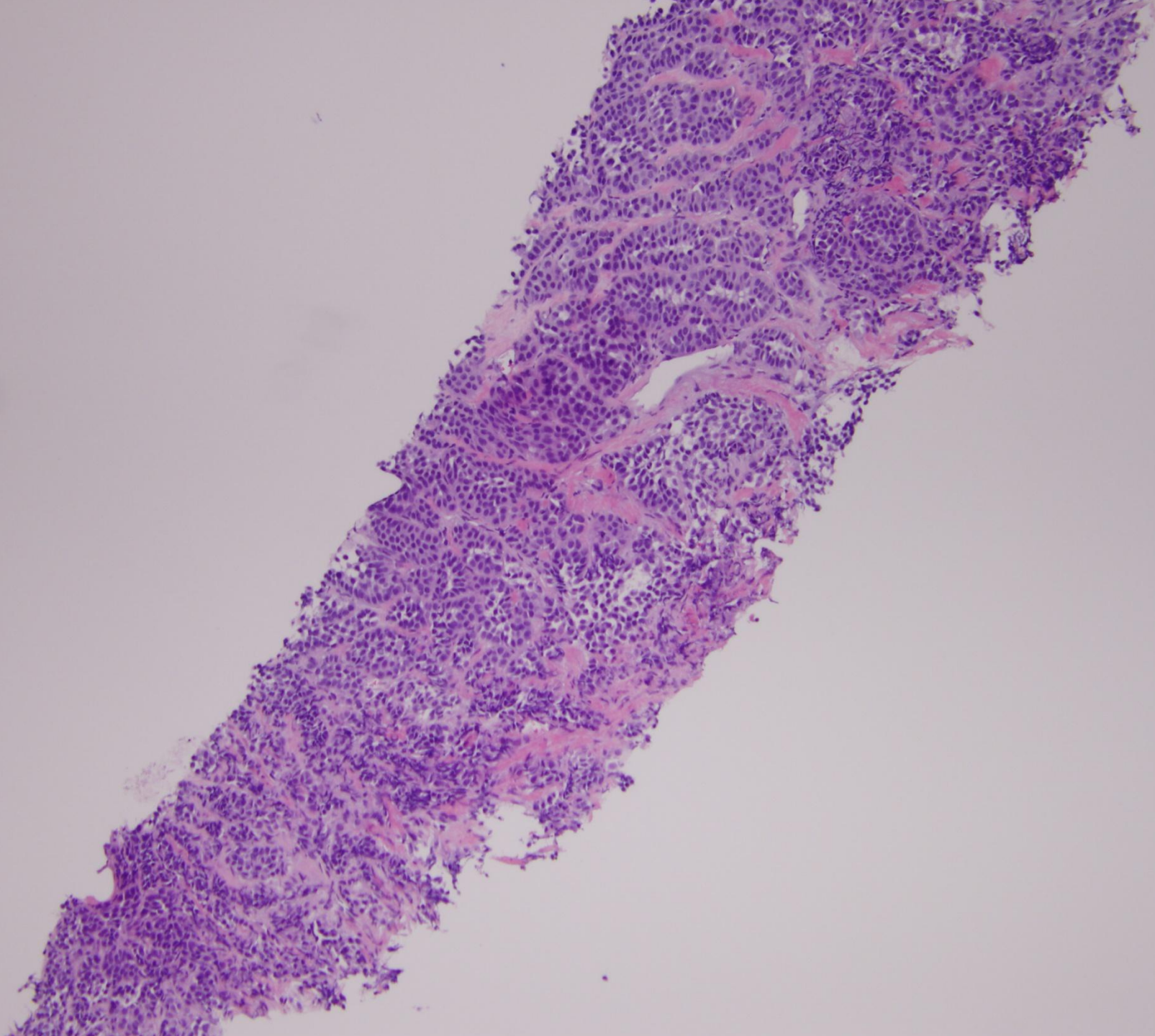




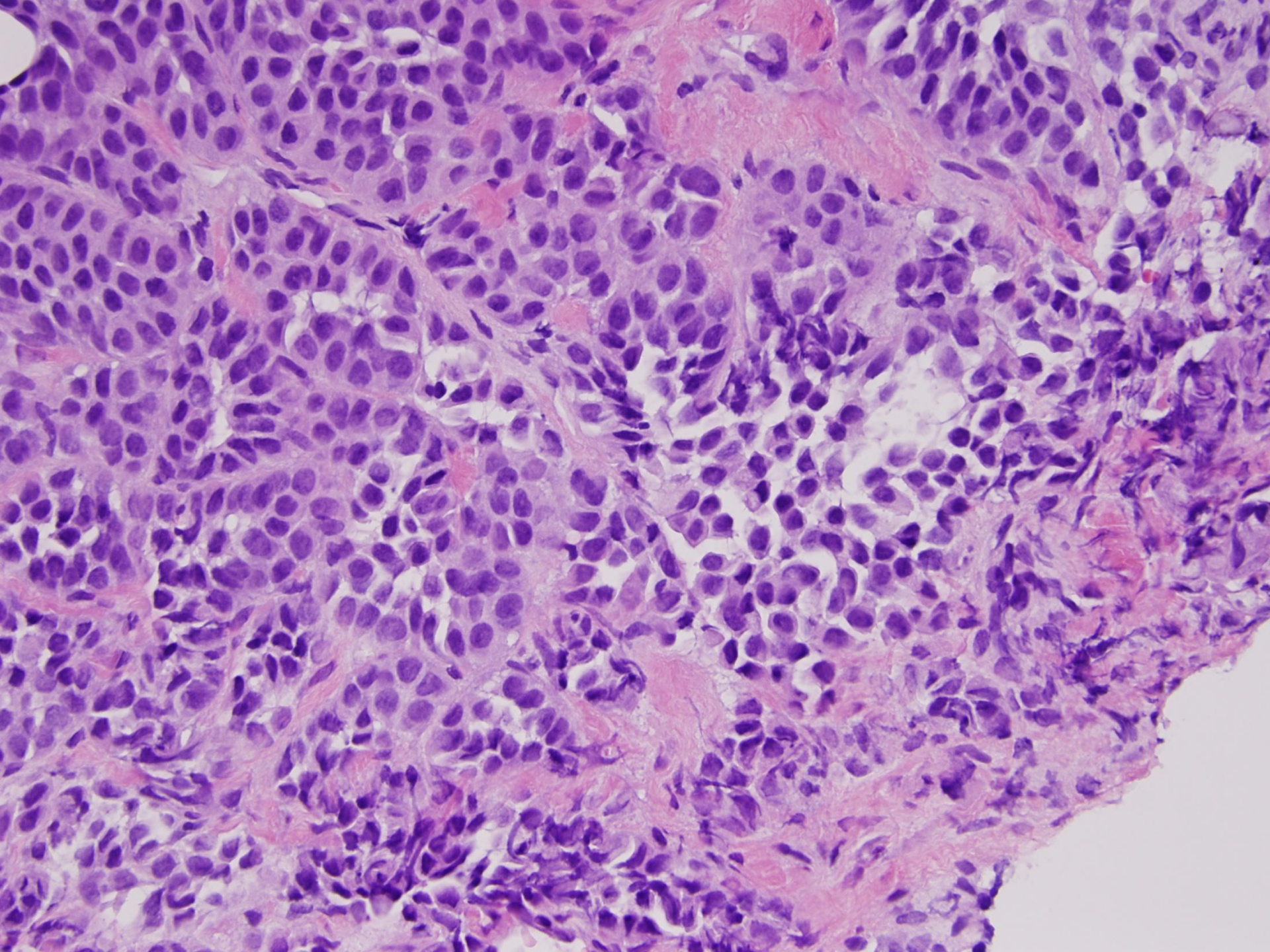






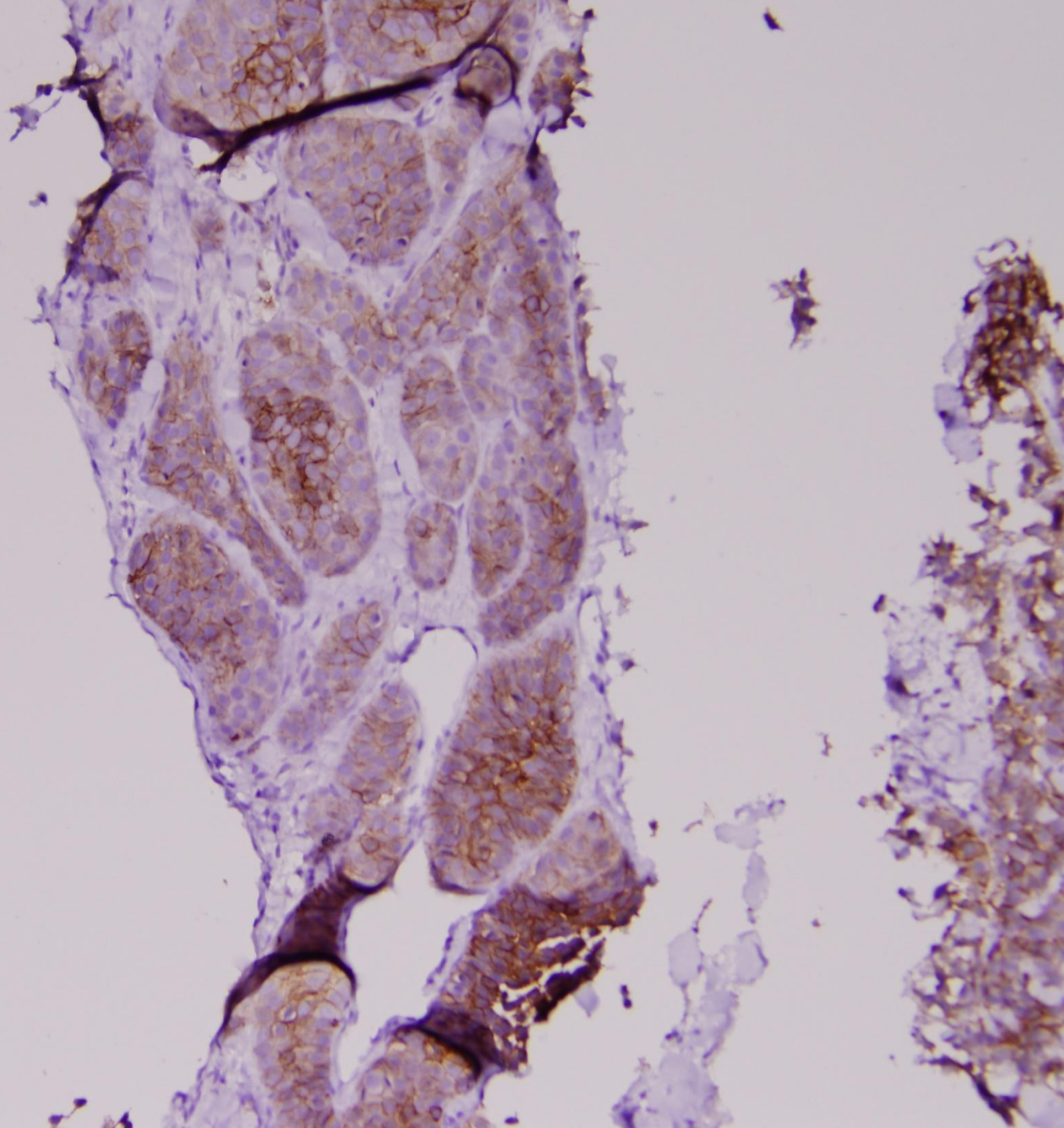




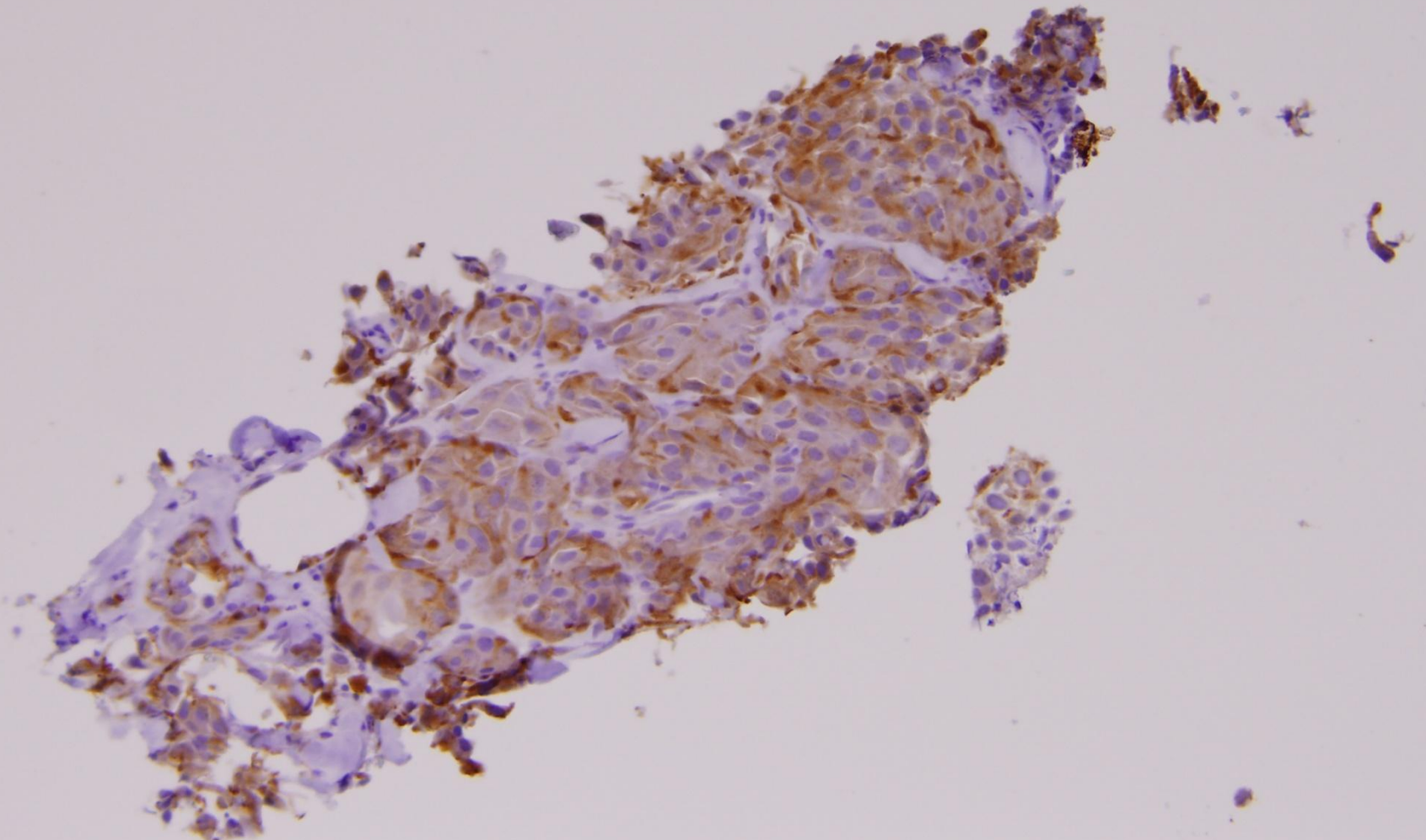




**CD56**



# Calcitonin





## Additional immunostaining results:

### **POS:**

CK7

TTF-1 (weak and very focal)

### **NEG:**

CK5/6

p63

Thyroglobulin

Mammaglobin

## FINAL DIAGNOSIS

Left neck mass, FNA and core biopsy: Neuroendocrine carcinoma. See COMMENT.

COMMENT:

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...The strong expression of calcitonin suggests a differential diagnosis of **medullary thyroid carcinoma versus laryngeal neuroendocrine carcinoma.**



In-house supraglottic biopsy performed a week later confirmed presence of neuroendocrine carcinoma

# Laryngeal Neuroendocrine Tumors

- Most common group of non-squamous tumors in larynx
- 4 main neuroendocrine tumors
  - paraganglioma
  - typical carcinoid (well diff neuroendocrine tumor)
  - moderately diff carcinoma (atypical carcinoid)
  - poorly diff carcinoma (small cell carcinoma)



- Typical carcinoid (aka well differentiated neuroendocrine tumor)=> rare, carries the best prognosis. Treated by conservative surgery without elective neck dissection. Resembles carcinoids elsewhere

- Moderately differentiated neuroendocrine carcinoma (atypical carcinoid) =>most common neuroendocrine tumor of larynx, vast majority occur within supraglottis. Common in older men who smoke. In contrast to typical carcinoid, should see mitoses, cellular pleomorphism, and/or necrosis.
- Cells positive for chromogranin, synaptophysin, keratin, calcitonin and CEA
- Unlike well differentiated laryngeal tumor, is an aggressive and potentially widely metastasizing malignancy



- Poorly differentiated (small cell) neuroendocrine carcinoma is similar in appearance and behavior to small cell lung carcinoma