

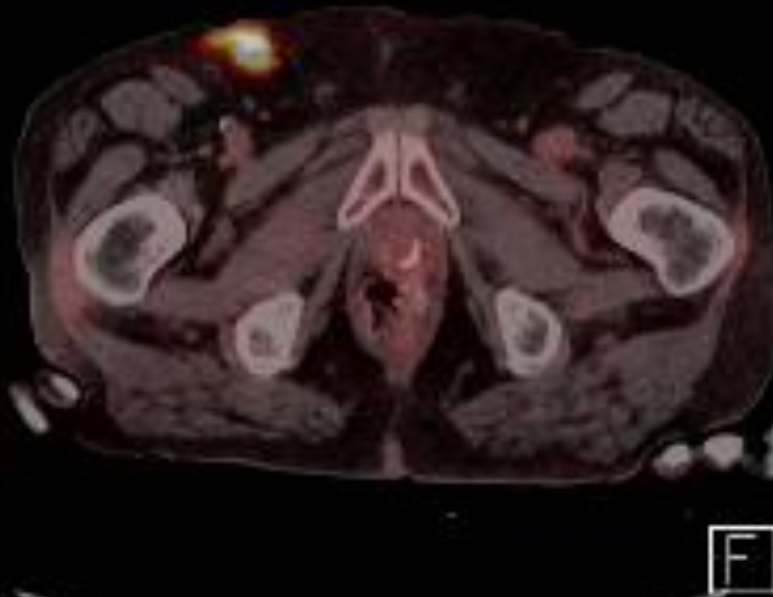
Interesting Case Conference

10/14/2013

Presentation

- 71 yo M history of right-sided pulmonary squamous cell carcinoma (T2, N1, Mx) Jan 2006
 - S/P right pneumonectomy and chemotherapy
- Fatigue, weight loss (15 lbs)
- Surveillance CT there are two indeterminate nodules (largest 6mm) in left upper lobe of lung.
- New irregular superficial mass in soft tissues of the right inguinal region

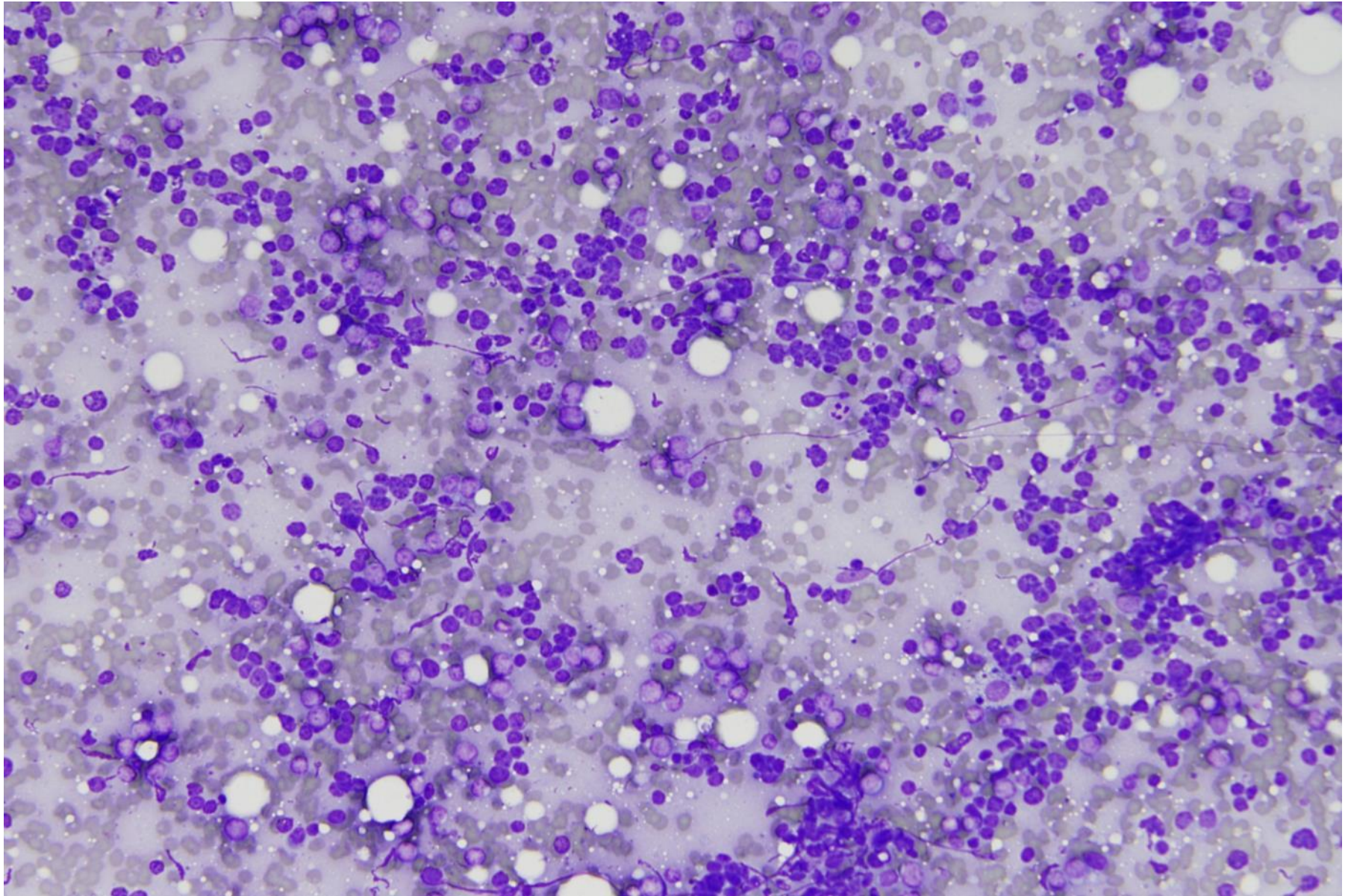
Radiology



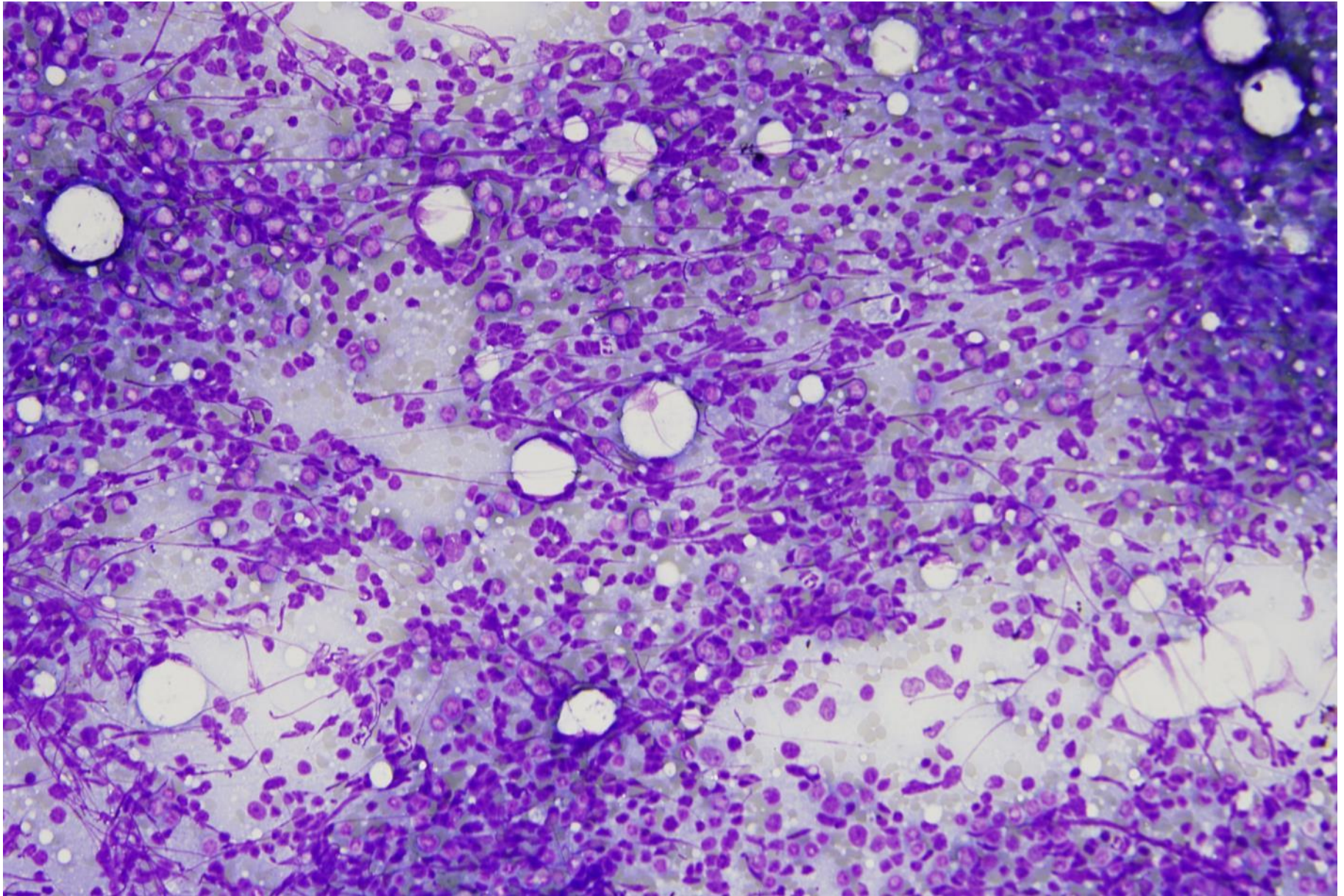
Physical exam

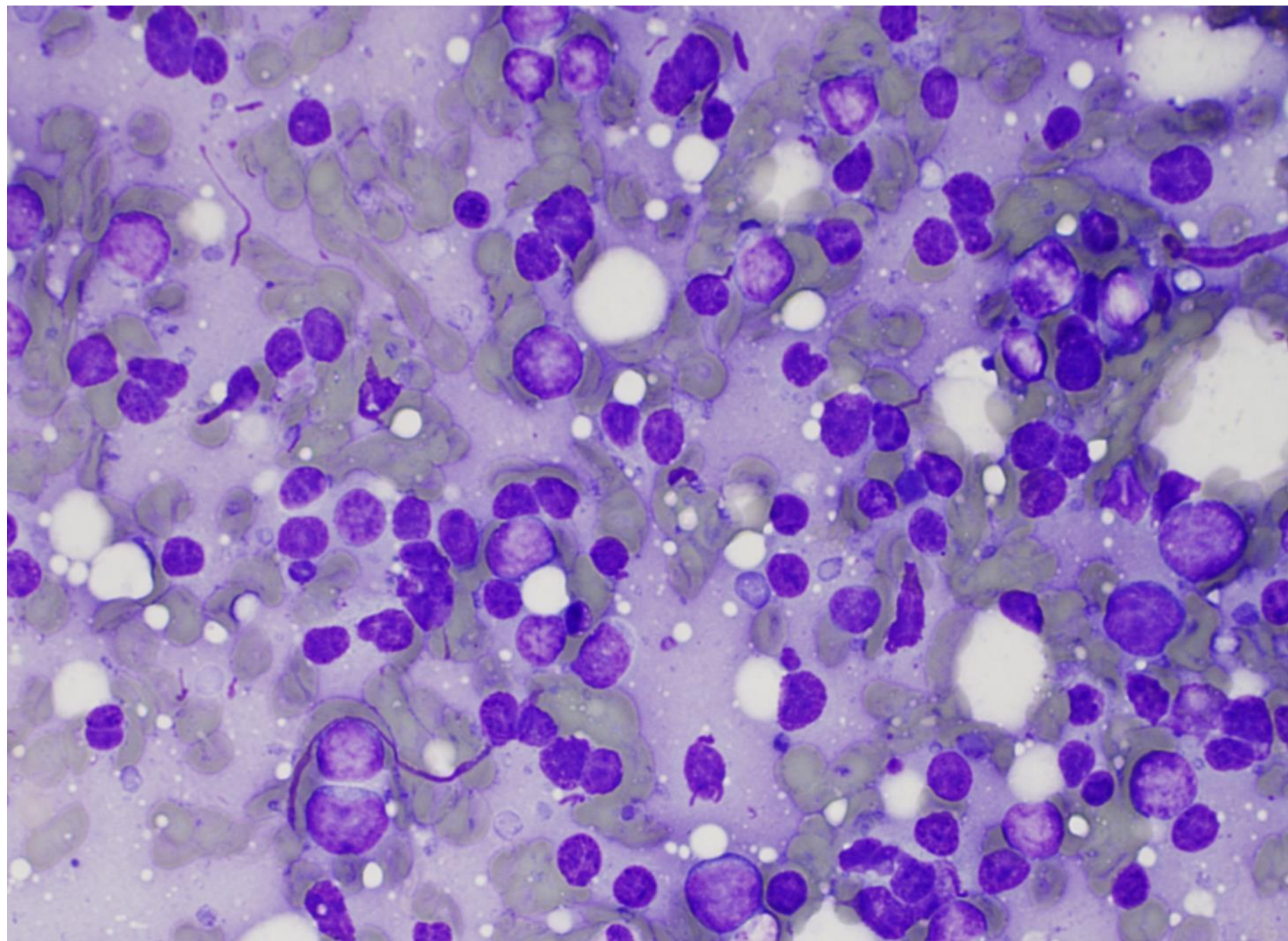
- Firm, subcutaneous nodule in the inguinal crease
- fixed
- 2x3 cm
- Non-tender
- Additional smaller sub centimeter inguinal nodules

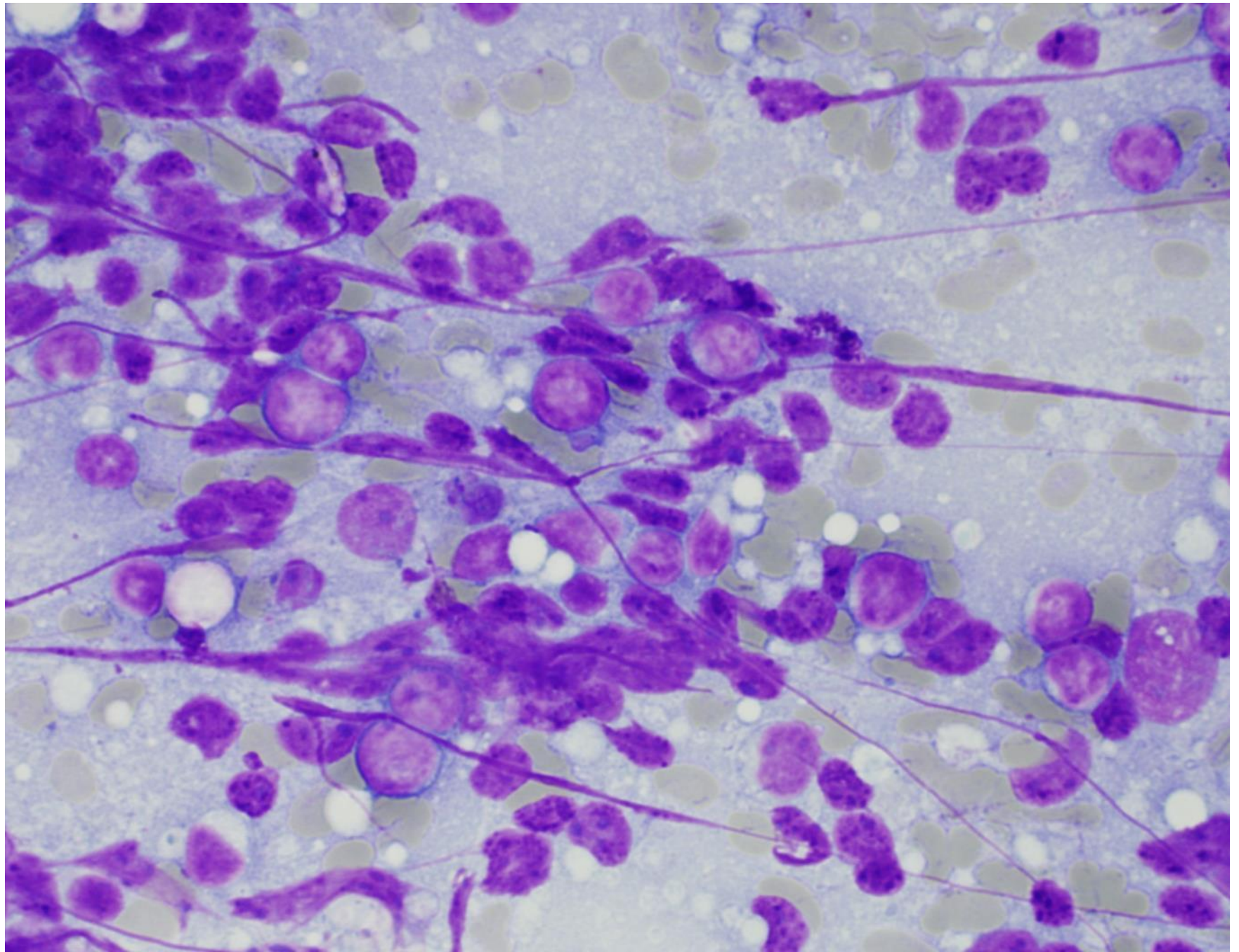
Pass # 1. Diff-Quik



Pass # 2. Diff-Quik



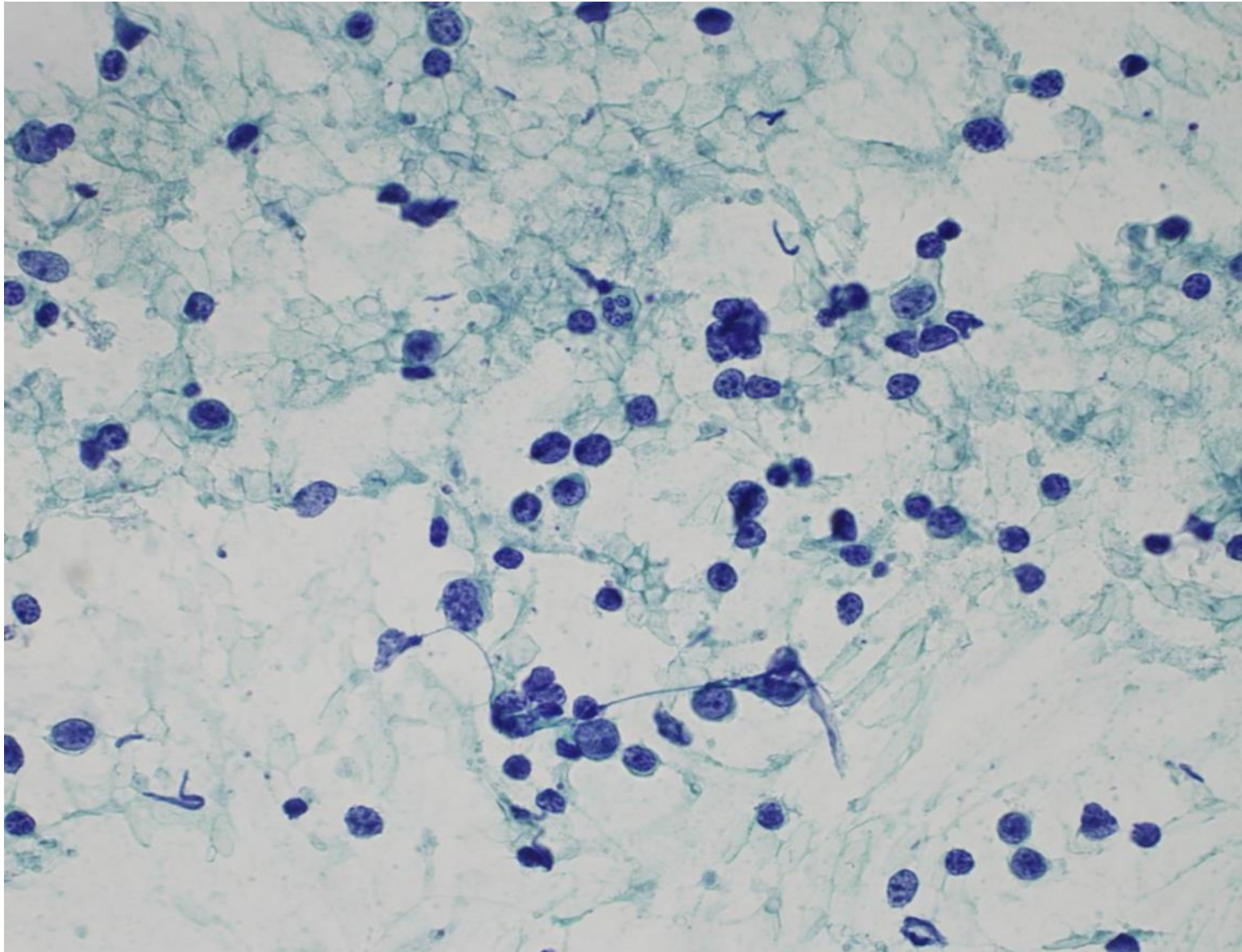


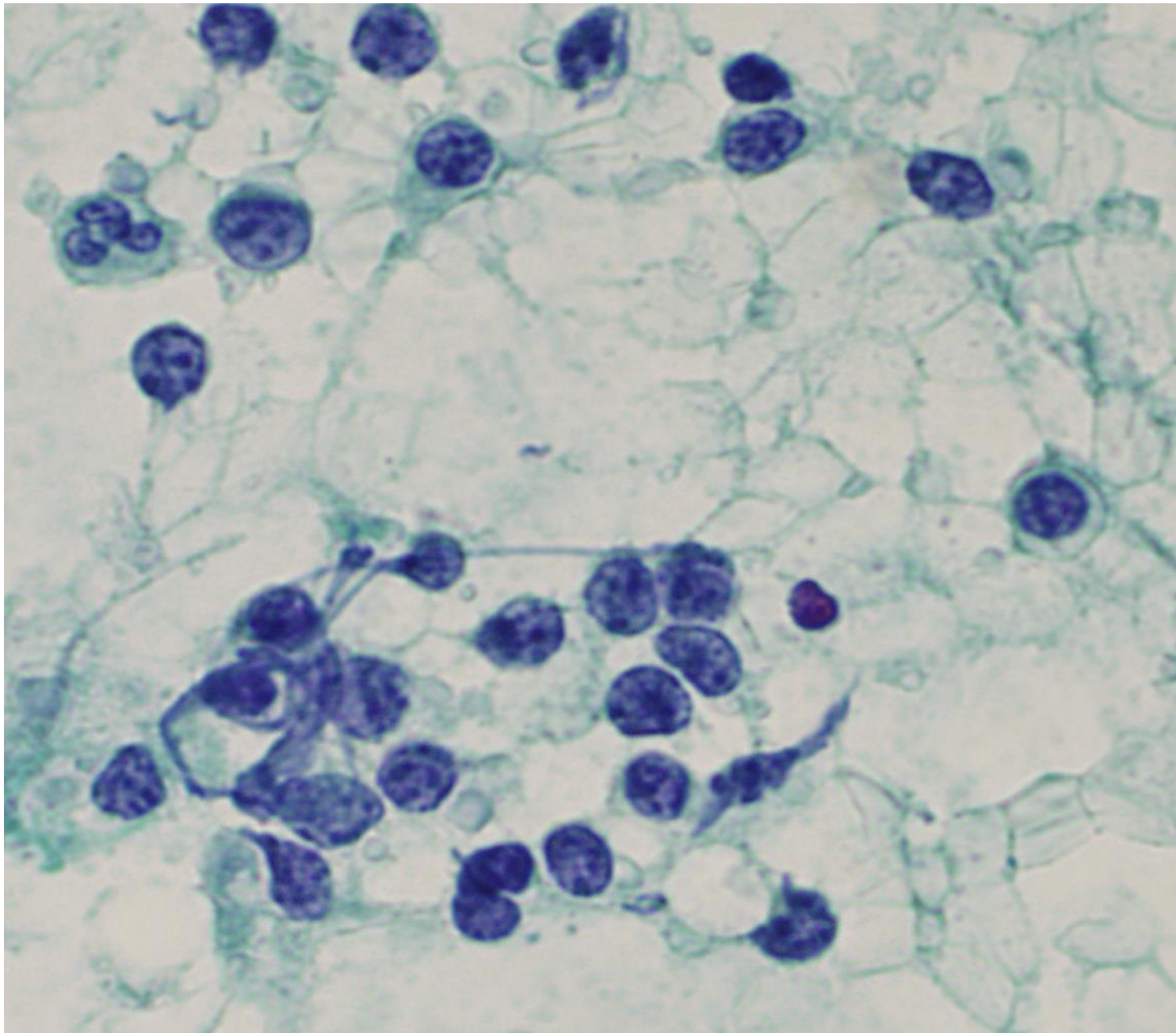


On-site Assessment

- Clinician (dermatologist), patient, and family in room
- Favor reactive lymphocytes
 - *But need to r/u a low grade lymphoproliferative process*
- Negative for metastatic carcinoma
- Additional passes
 - Total of 6 passes
 - One pass dedicated for flow

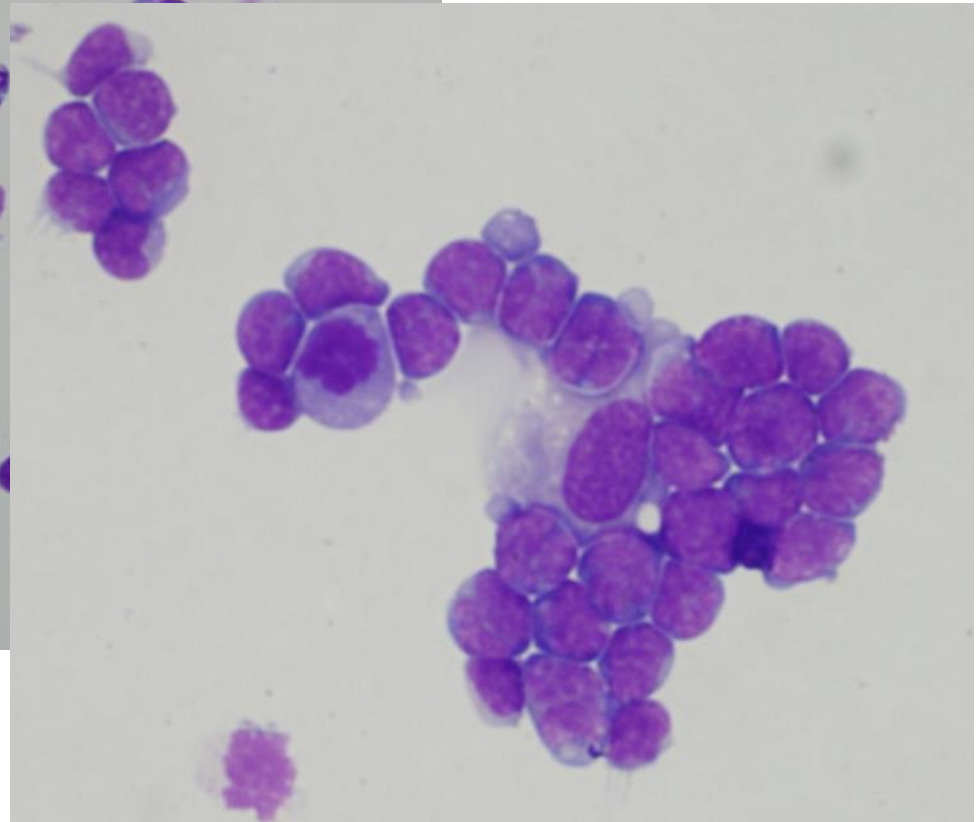
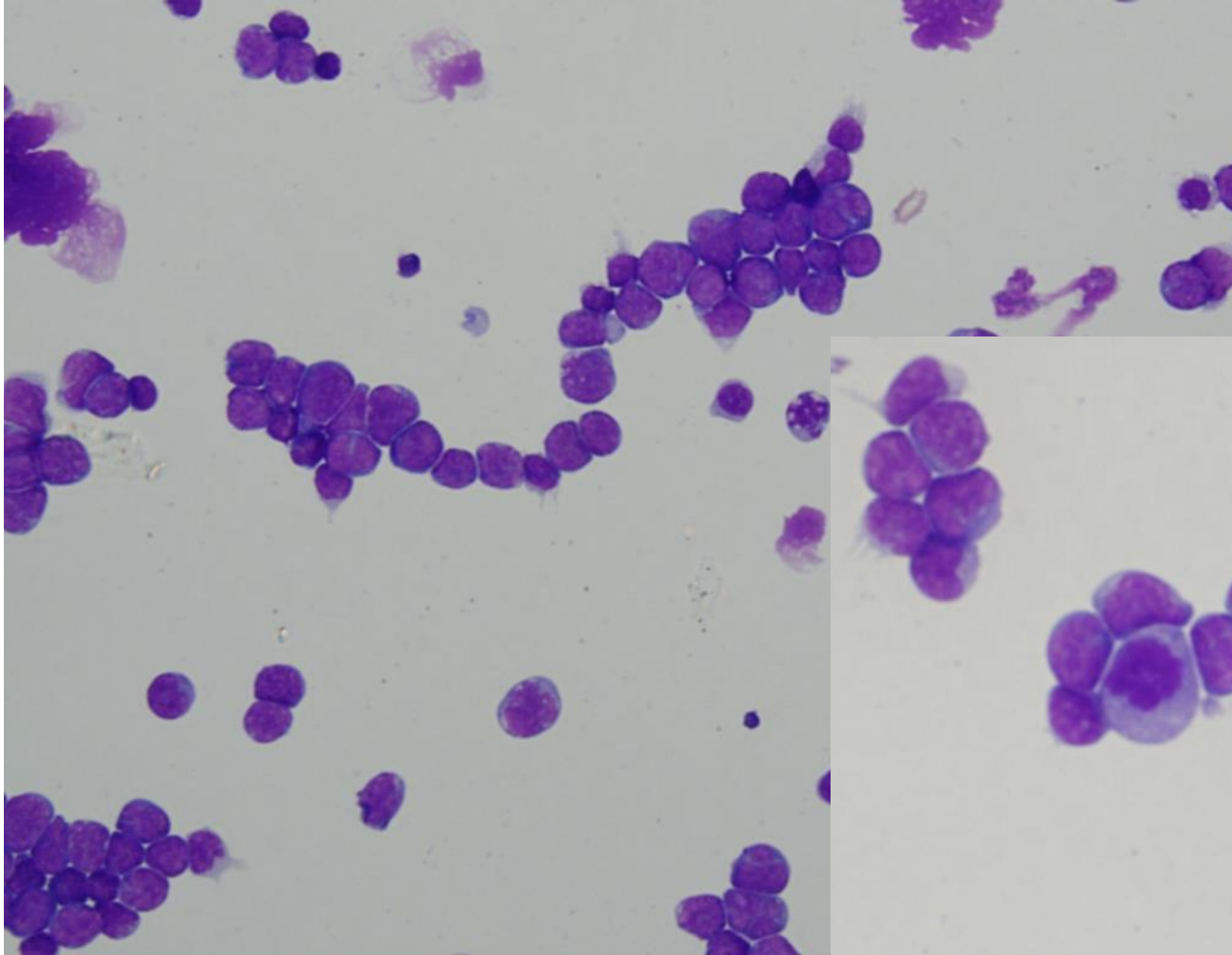
Pap stain, low power

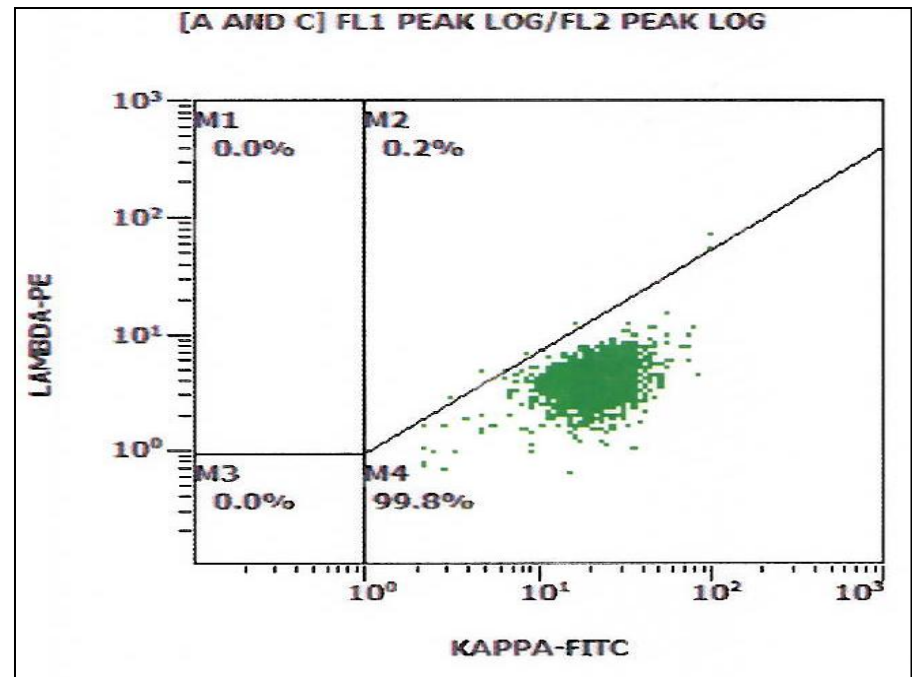
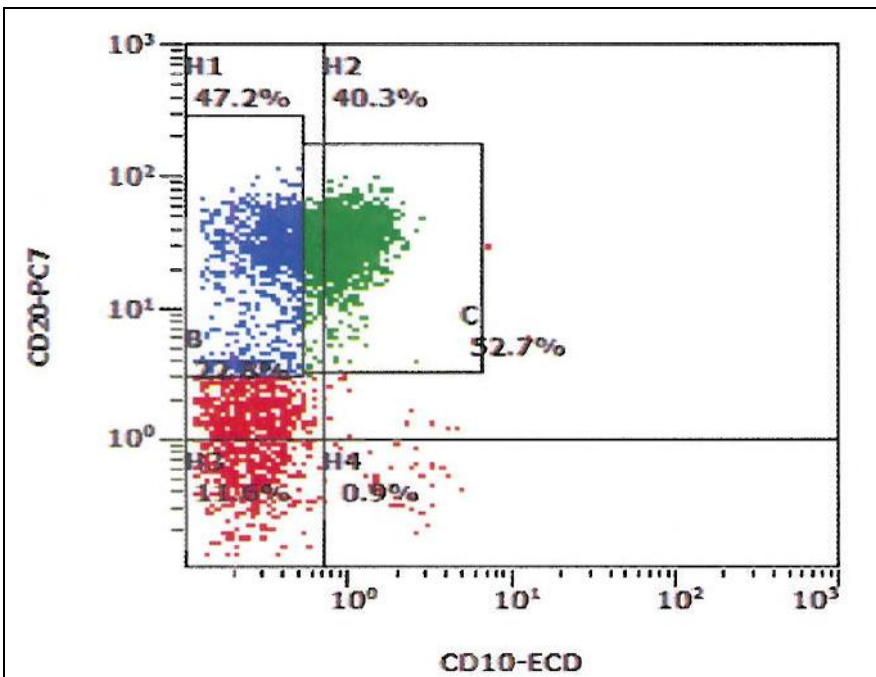
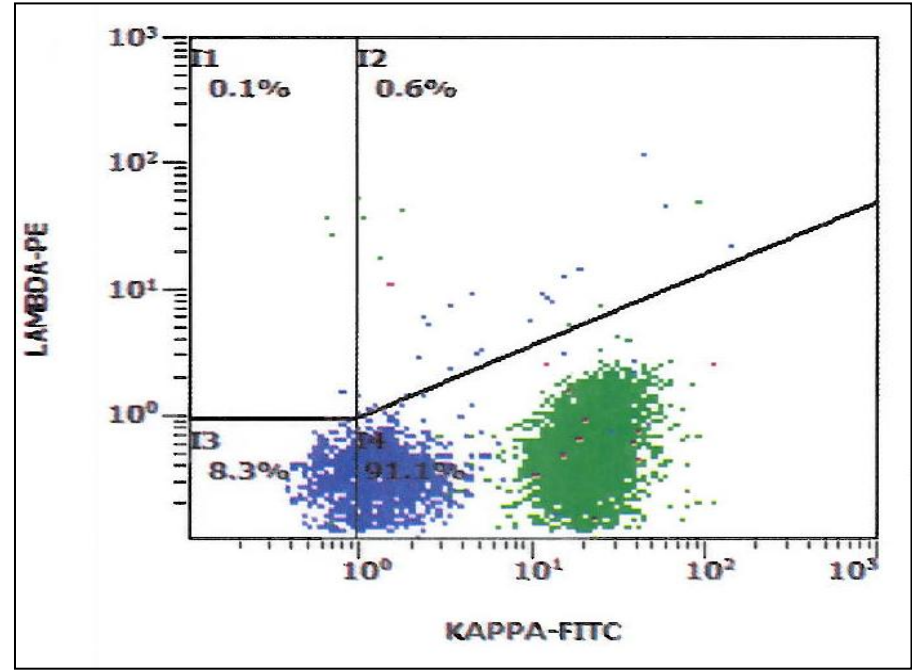
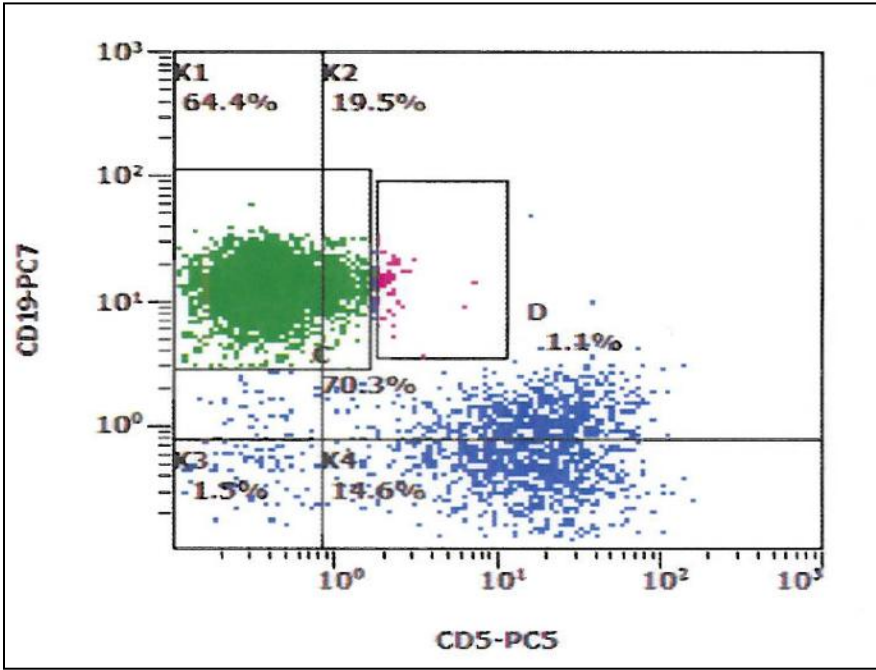




**Pap
Stain
High
Power**

Cytospin in heme path





Flow summary

- CD10: Dim
- CD19: Dim-moderate
- CD20: moderate
- FMC-7: moderate
- Kappa: moderate
- K/L ratio: 712

Flow sign-out:

C10+/-, kappa restricted mature B-cell neoplasm.

Histopathologic assessment of a core or excisional biopsy required for final diagnosis and classification.

Cancer Epidemiology

Cancer Type	Estimated New Cases	Estimated Deaths
Bladder	72,570	15,210
Breast (Female – Male)	232,340 – 2,240	39,620 – 410
Colon and Rectal (Combined)	142,820	50,830
Endometrial	49,560	8,190
Kidney (Renal Cell) Cancer	59,938	12,586
Leukemia (All Types)	48,610	23,720
Lung (Including Bronchus)	228,190	159,480
Melanoma	76,690	9,480
Non-Hodgkin Lymphoma	69,740	19,020
Pancreatic	45,220	38,460
Prostate	238,590	29,720
Thyroid	60,220	1,850

<http://www.cancer.org/cancer/cancerbasics/cancer-prevalence>

Cytology and Lymphoma

- Although tissue often required FNA can
 - Rule out other benign causes for lymphadenopathy
 - Rule out carcinoma metastasis
 - Confirm LN vs cyst vs soft tissue tumor, salivary gland, etc
 - Collect material for ancillary studies

Cytology and lymphoma

Small cells (1-2 x RBC)

- SLL/CLL
- Mantle cell
- Follicular
- Marginal Zone, (MALT)
- Lymphoplasmacytic

Intermediate (2-3x RBC)

- Burkitt
- Mantle cell, blastoid variant
- Lymphoblastic lymphoma

Large cells (>3x RBC)

- DLBCL
- ALCL
- PTLD
- T-cell lymphomas (mixed populations)

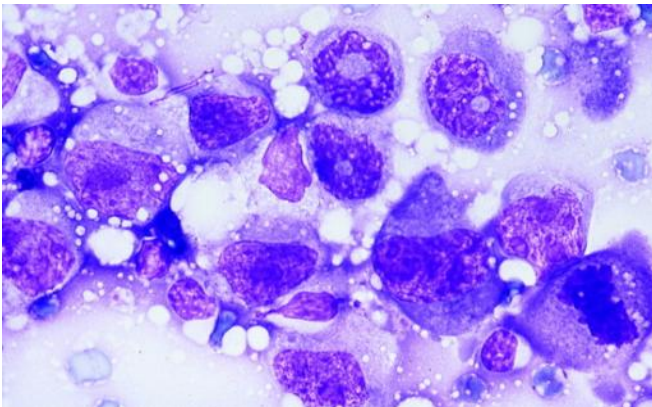
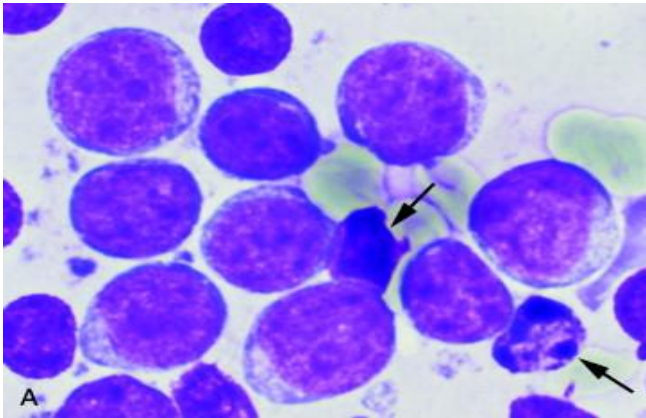
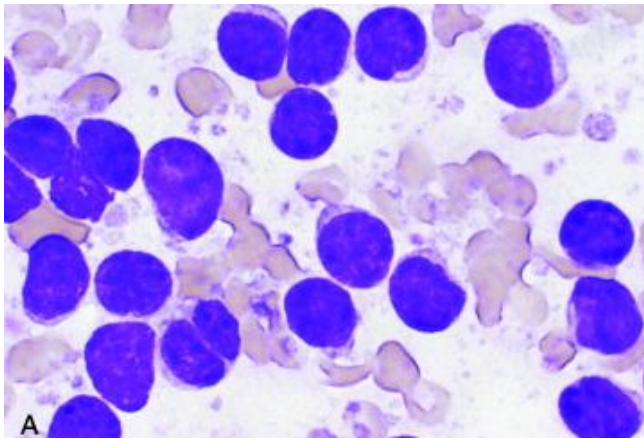


TABLE 11.6 -- DIFFERENTIAL IMMUNOPHENOTYPE AND GENETICS OF SMALL B-CELL LYMPHOMAS

	Small Lymphocytic	Mantle Cell	Follicular	Marginal Zone	Lymphoplasmacytic
CD5	+	+	-	-	-
CD10	-	-/+	+/-	-	-
CD20	+/-	+	+	+	+
CD23	+	-	-/+	-	-
cyclin D1	-	+	-	-	-
CD43	+	+	-	-/+	+/-
Tdt	-	-	-	-	-
genetics	trisomy 12 (30%), others	t(11;14)	t(14;18)	trisomy 3, t(11;18), others	inconsistent