

Hematology Case Conference

3/25/03

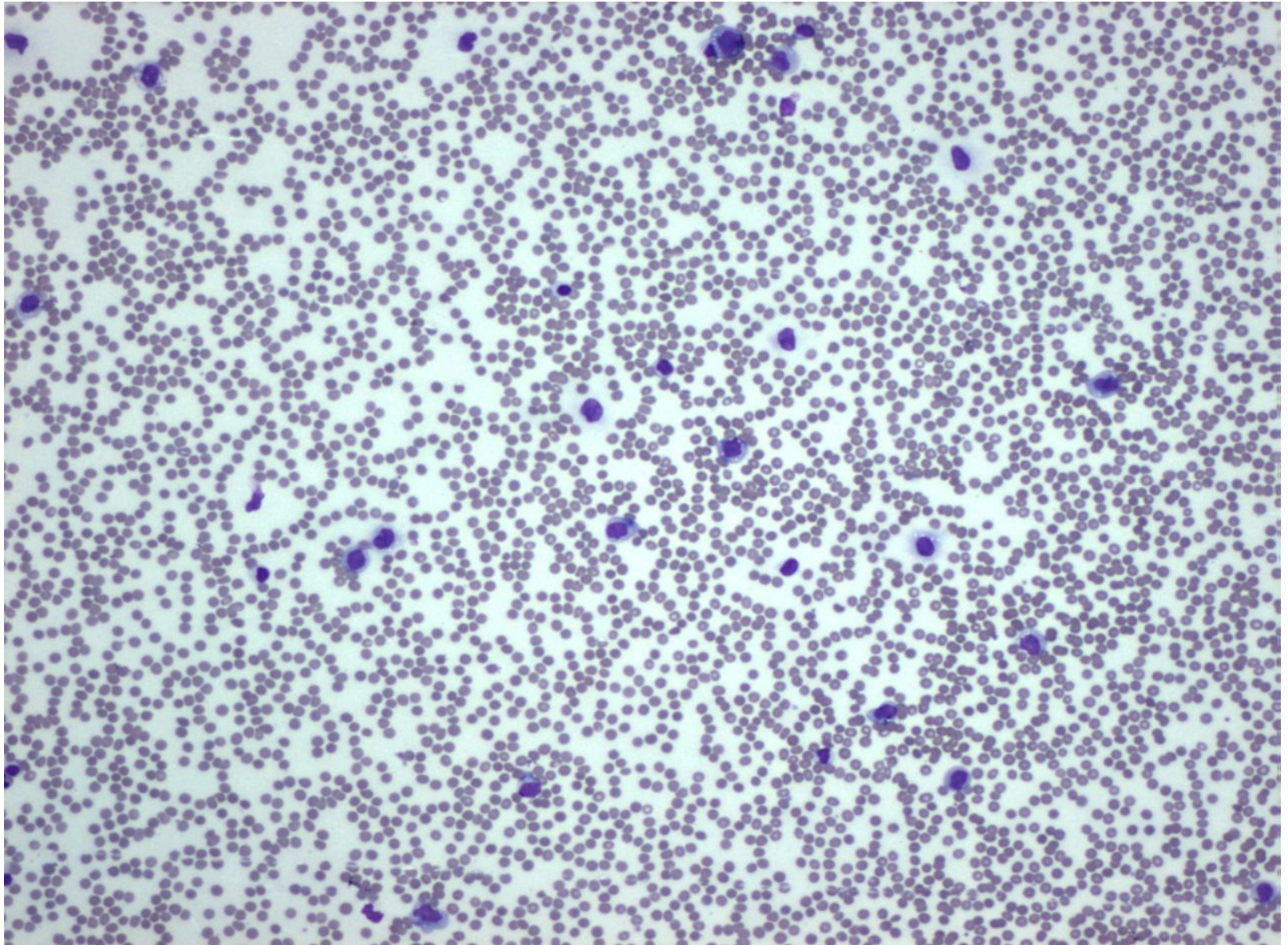


HB-03-24

Patient Name: DAVXXXX, WANXXXX

- 52-year-old woman with fever
- WBC= 21.3, Hgb=11.4, Plt=25,000, Retic= 0.6,
MCV= 83.9
Seg 3, Band 1, Lymph 10, Mono 12, Eos 1, Meta 1, Blast 72
- Bone marrow aspirate: Blast 92, Lymph 5, RBC 3
- Biopsy 95% cellularity

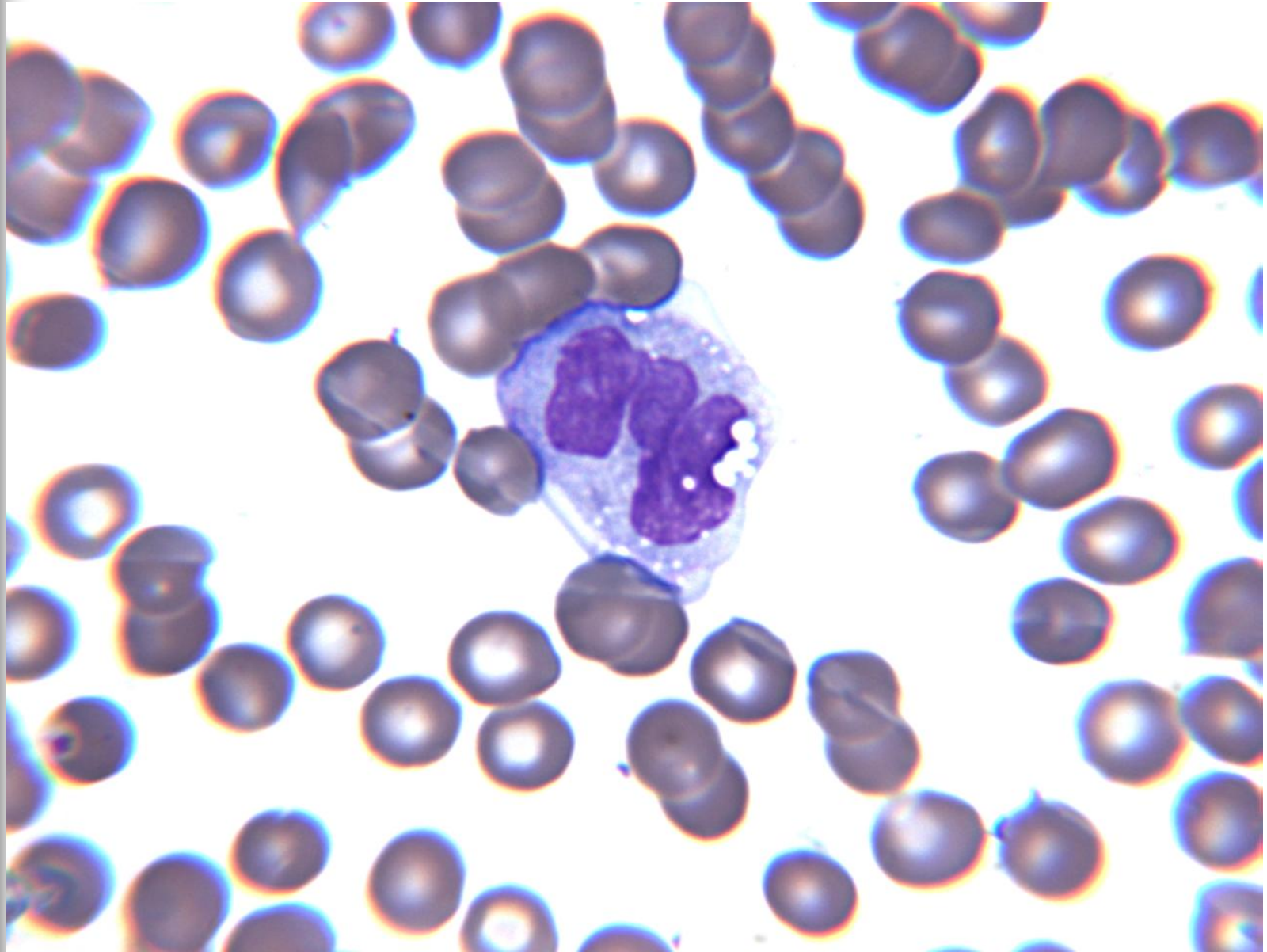
Peripheral Blood Smear



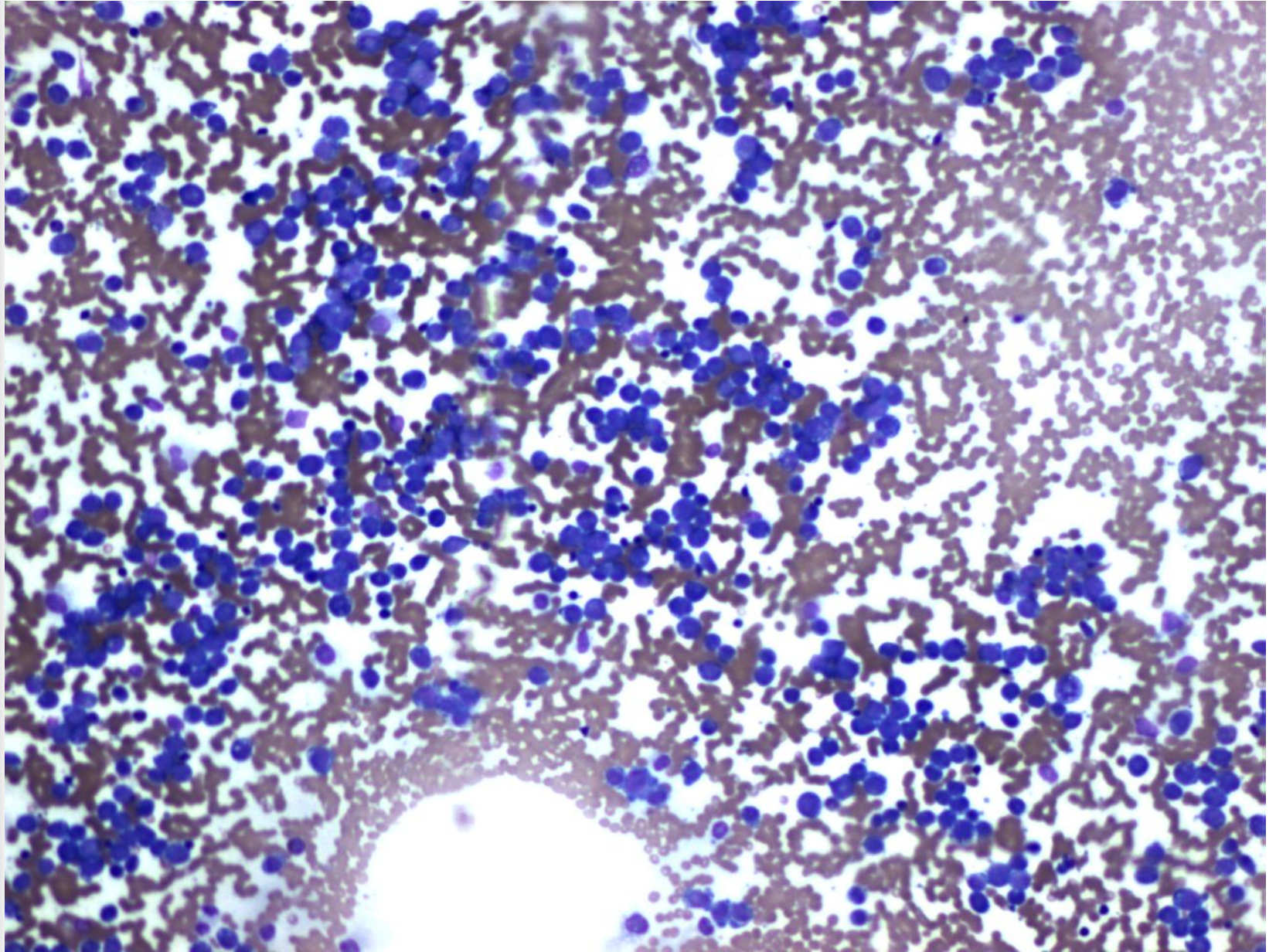
Peripheral Blood Smear (cont'd)



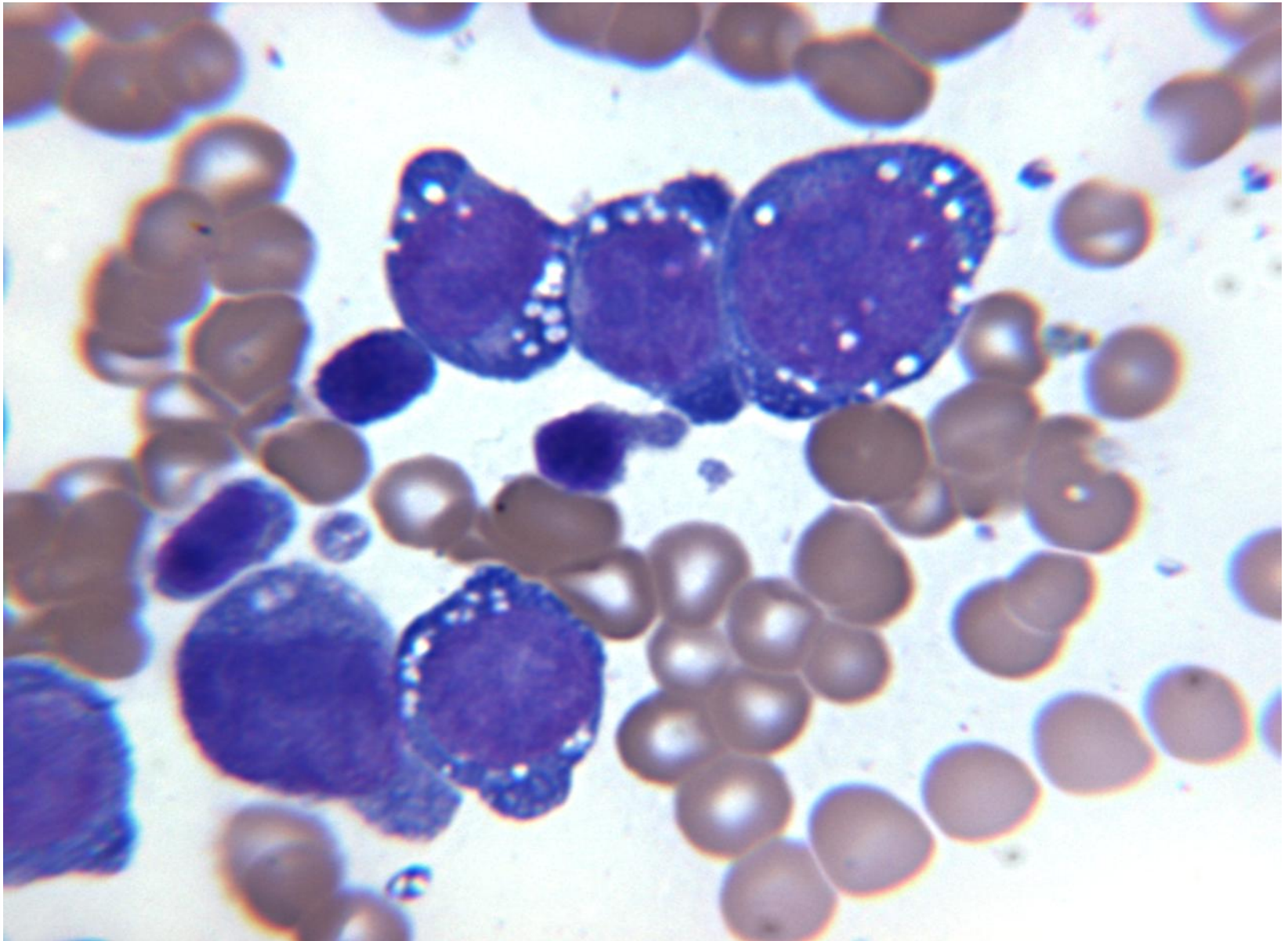
Peripheral Blood Smear (cont'd)



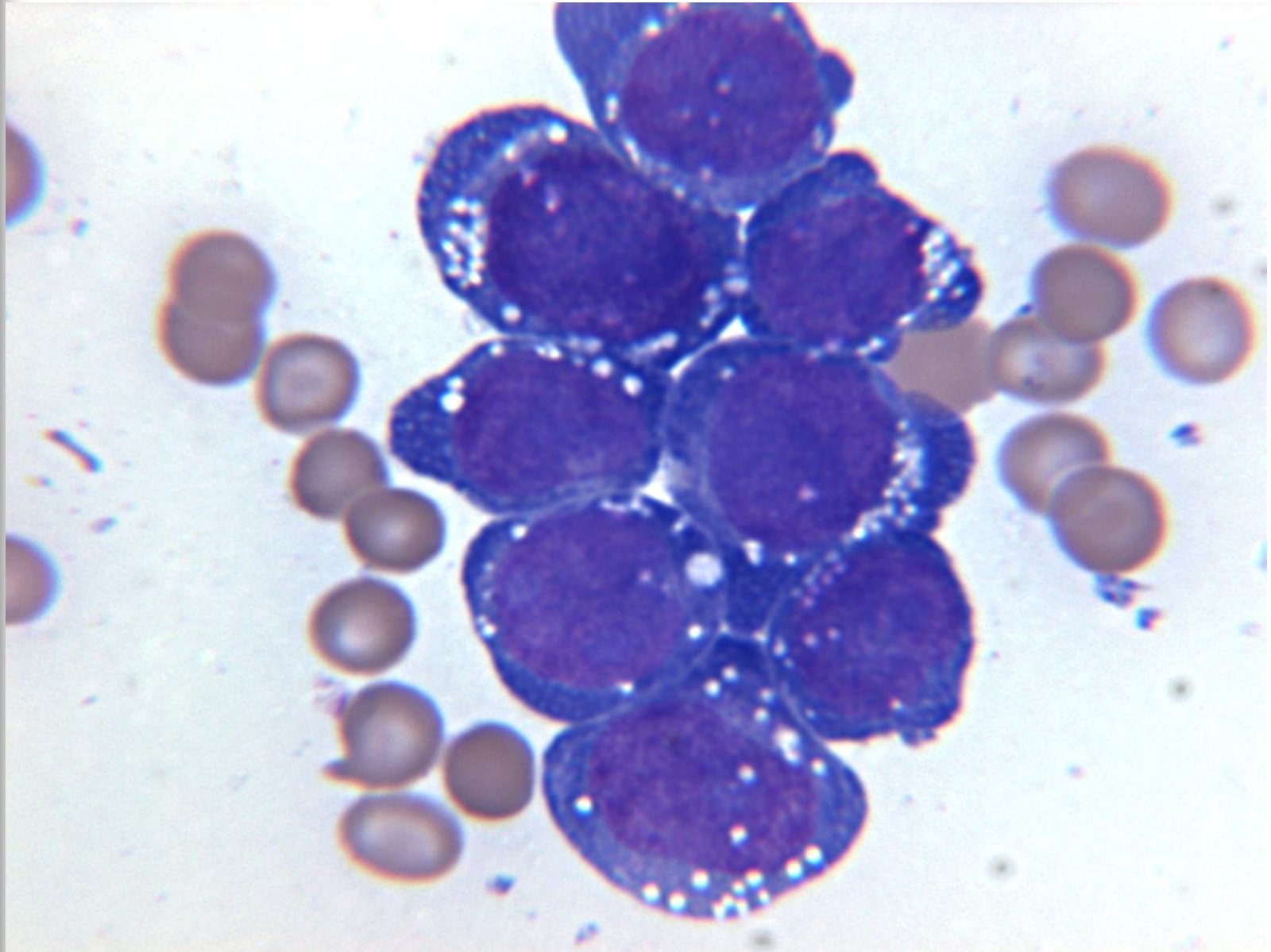
Aspirate Smear



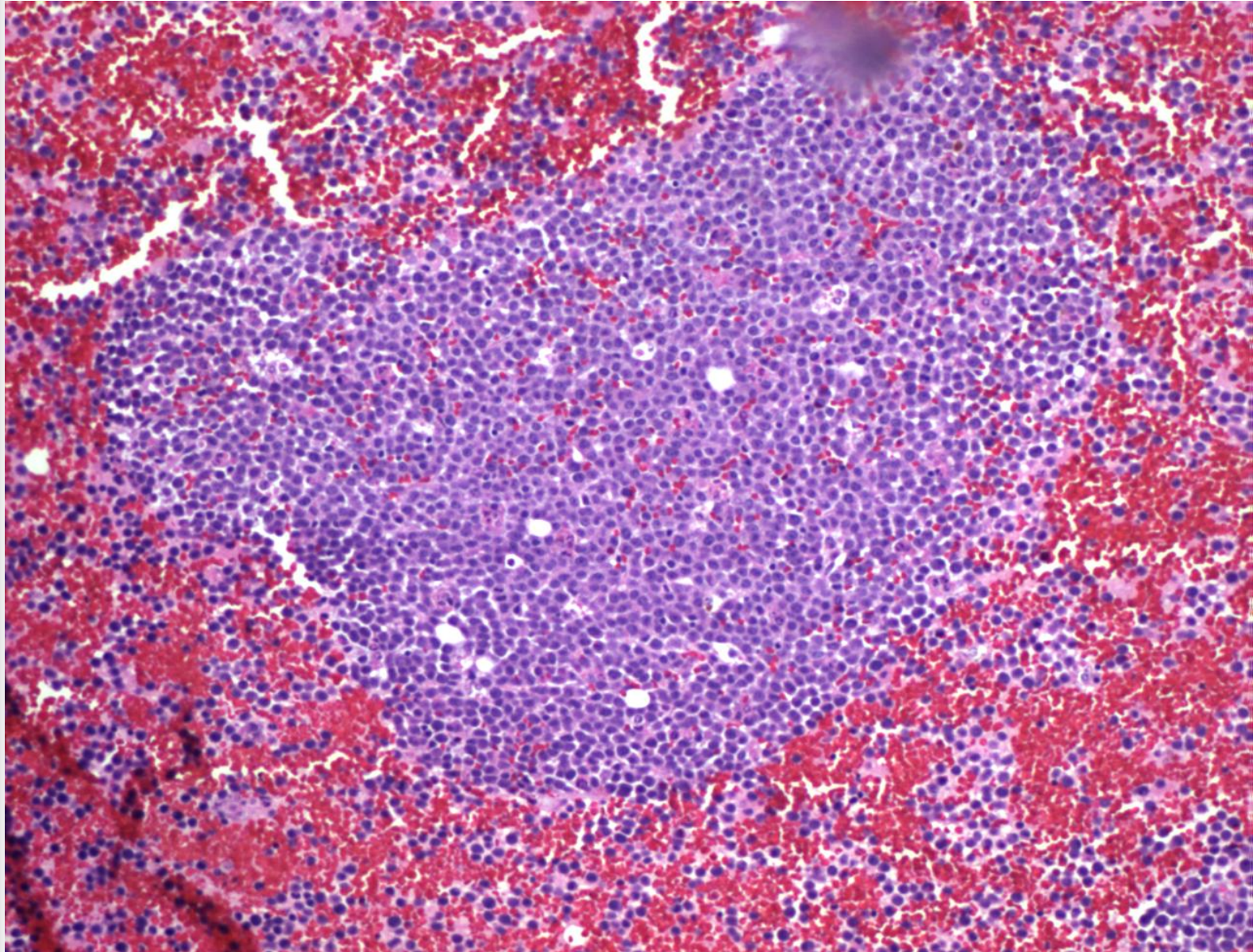
Aspirate Smear (cont'd)



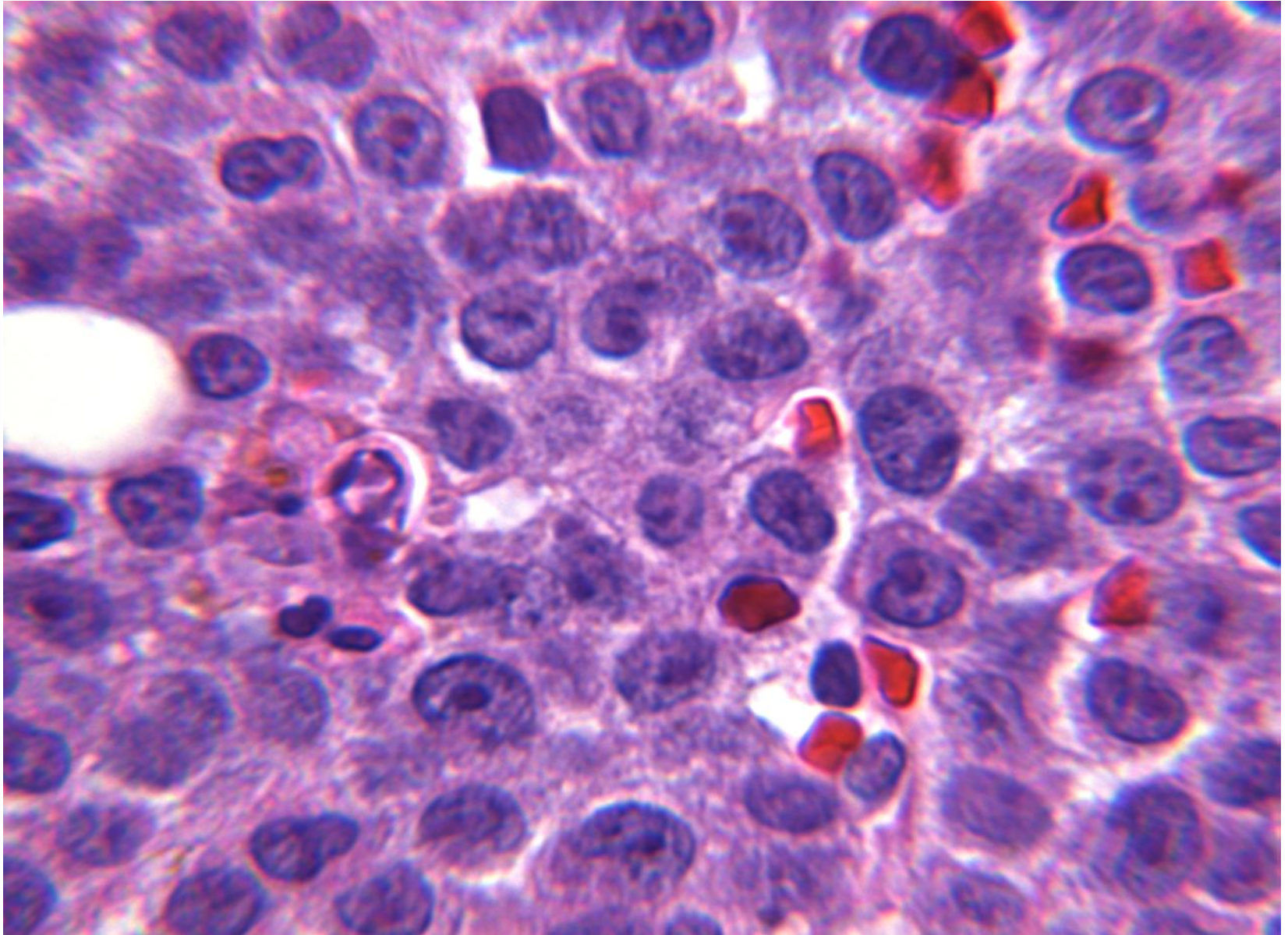
Aspirate Smear (cont'd)



Clot Section



Clot Section (cont'd)





Diagnosis

- Positive for CD13, CD33, CD11b, CD11c, CD14
- More than 80% monoblasts-> consistent with acute monoblastic leukemia (AML-M5a)
- Cytogenetics: N/A (strong association with del or trans of 11q)

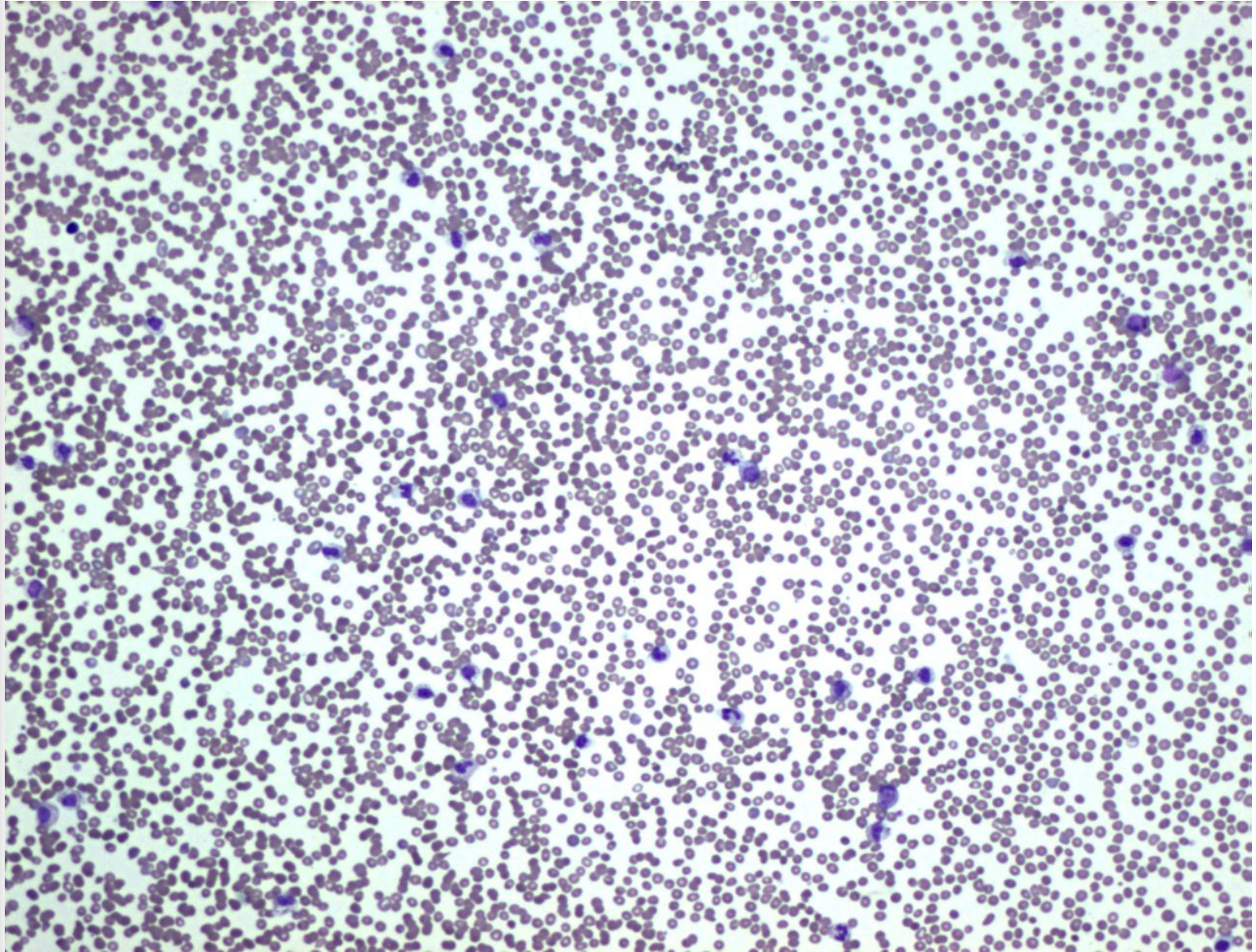


HB-03-26

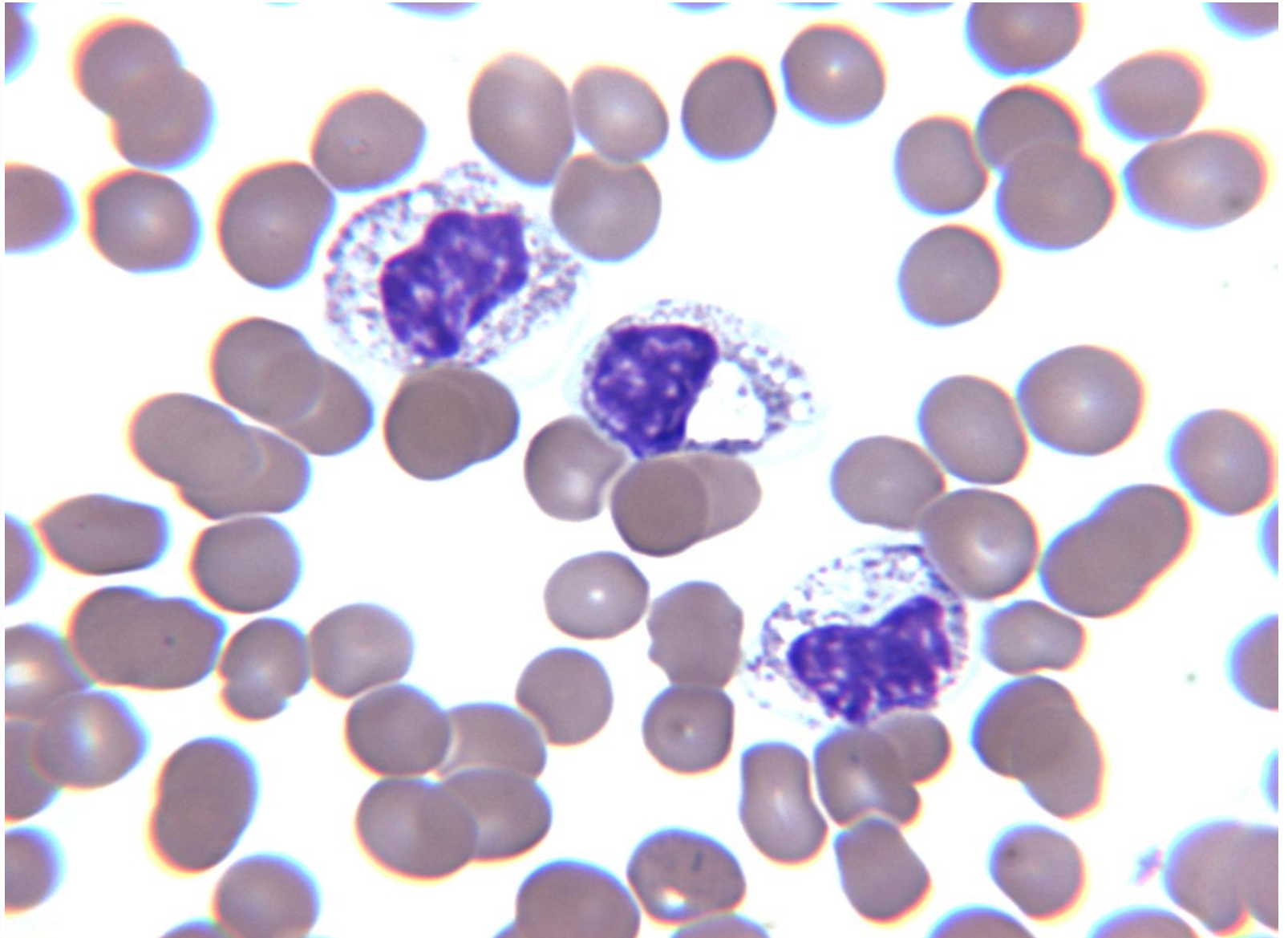
Patient Name: MCLXXXX, JOHXXXX

- 85 year-old male with anemia, thrombocytopenia and granulocytosis.
- The patient also has a lung mass (pneumonia vs. tumor ?)
- WBC= 17.3, Hgb= 10.1, Plt= decreased, MCV=101.4
Seg 18, Band 40, Lymph 14, Eos 4, Baso 0, Meta 12, Myelo 10, Blast 2, NRBC 2
- Bone marrow aspirate: Blast 1, Promyelo 2, Myelo 54, Meta 7, PMN&band 4, Eos 1, Mono 1, Lymph 7, PC 1, RBC 23 (M/E 2.9)
- Bone marrow biopsy 90% cellularity

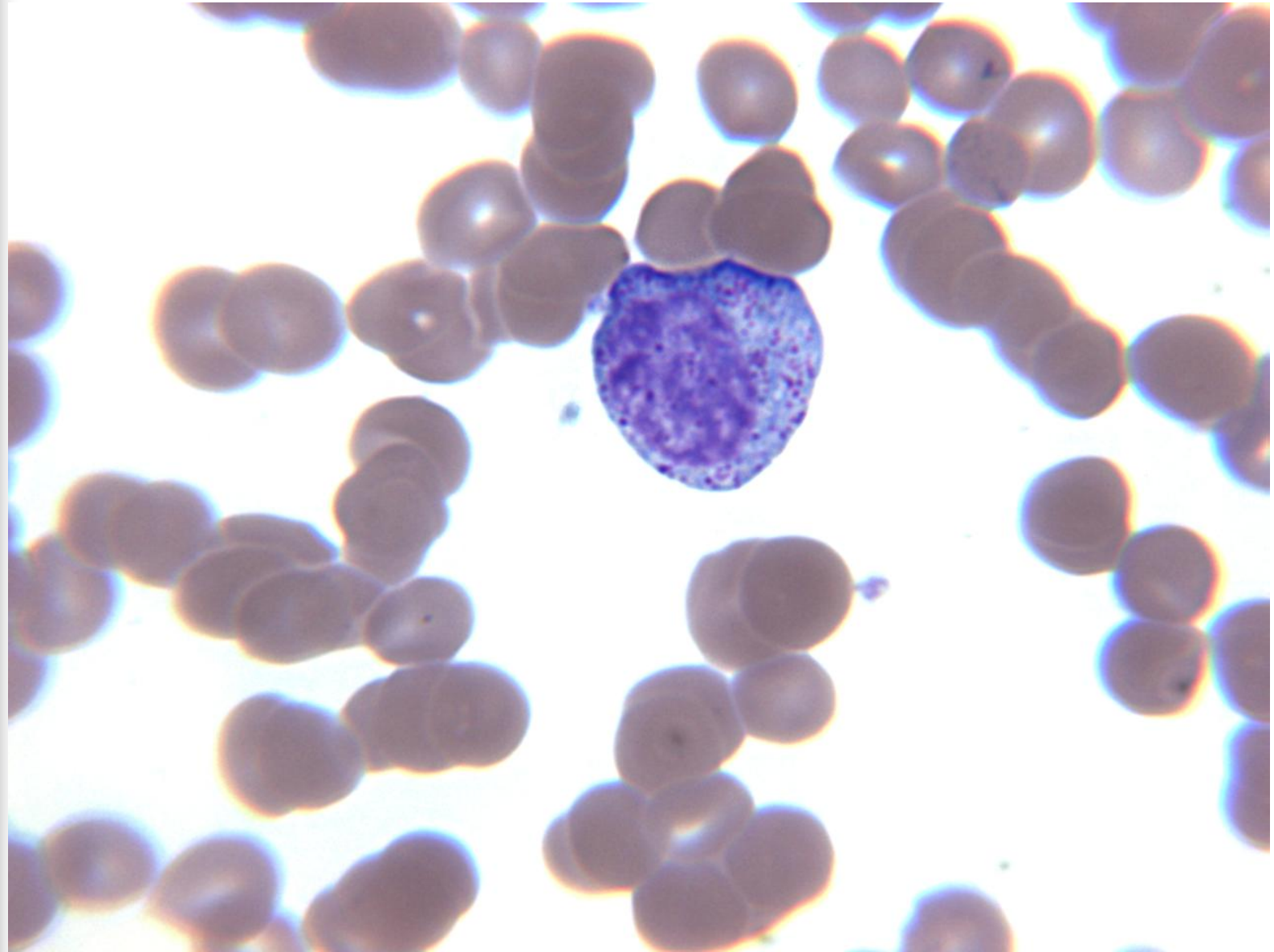
Peripheral Blood Smear



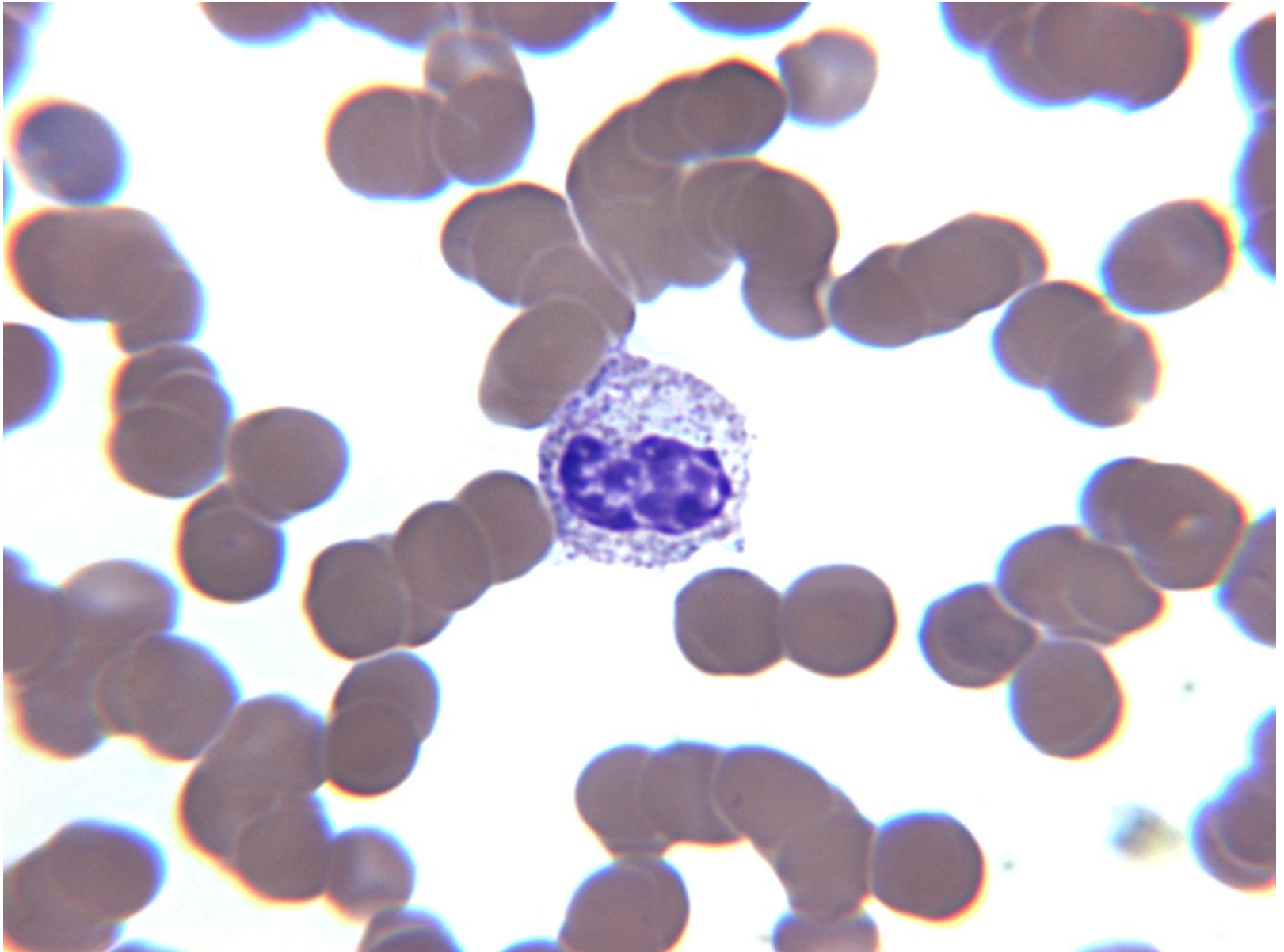
Peripheral Blood Smear (cont'd)



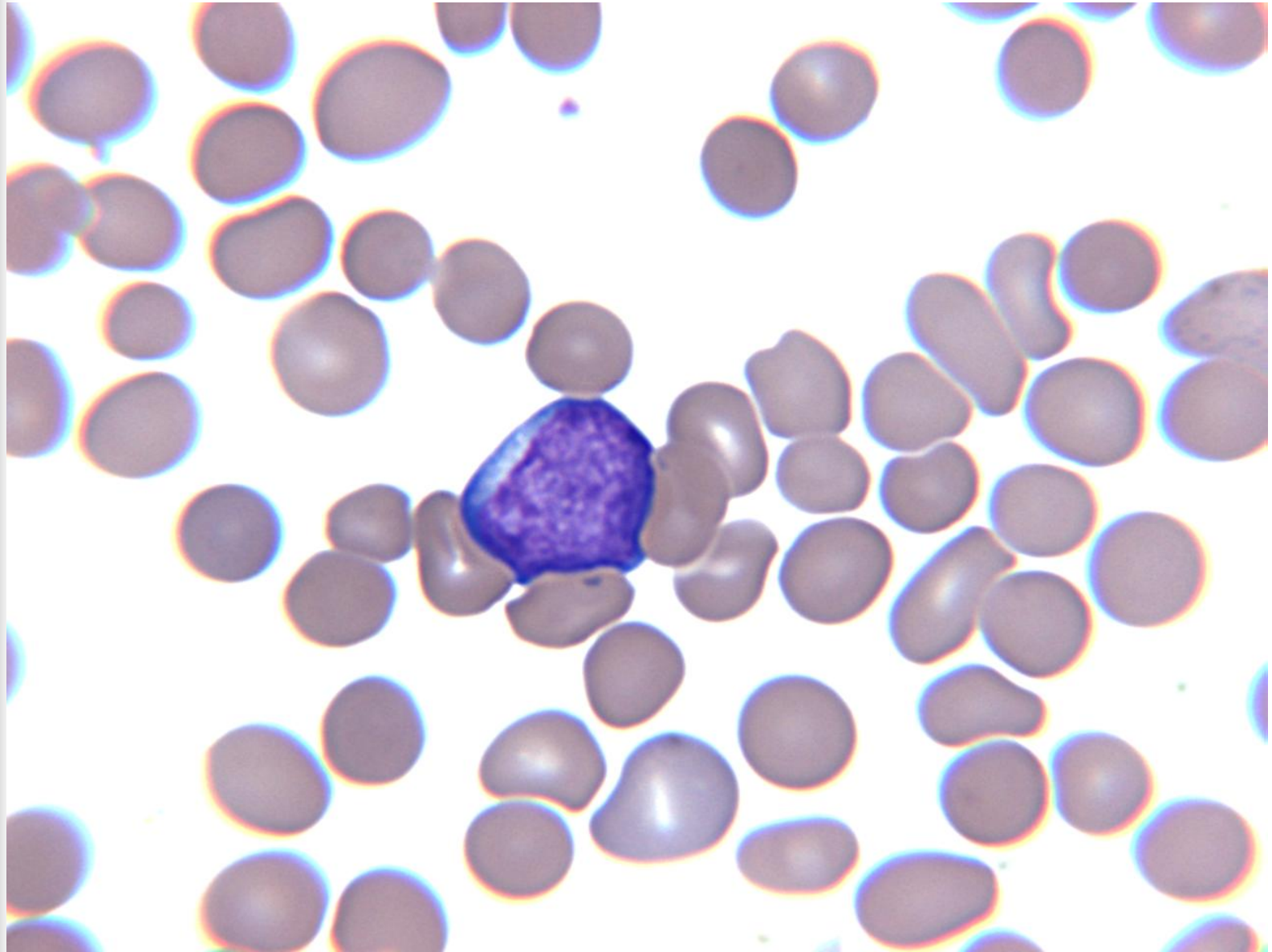
Peripheral Blood Smear (cont'd)



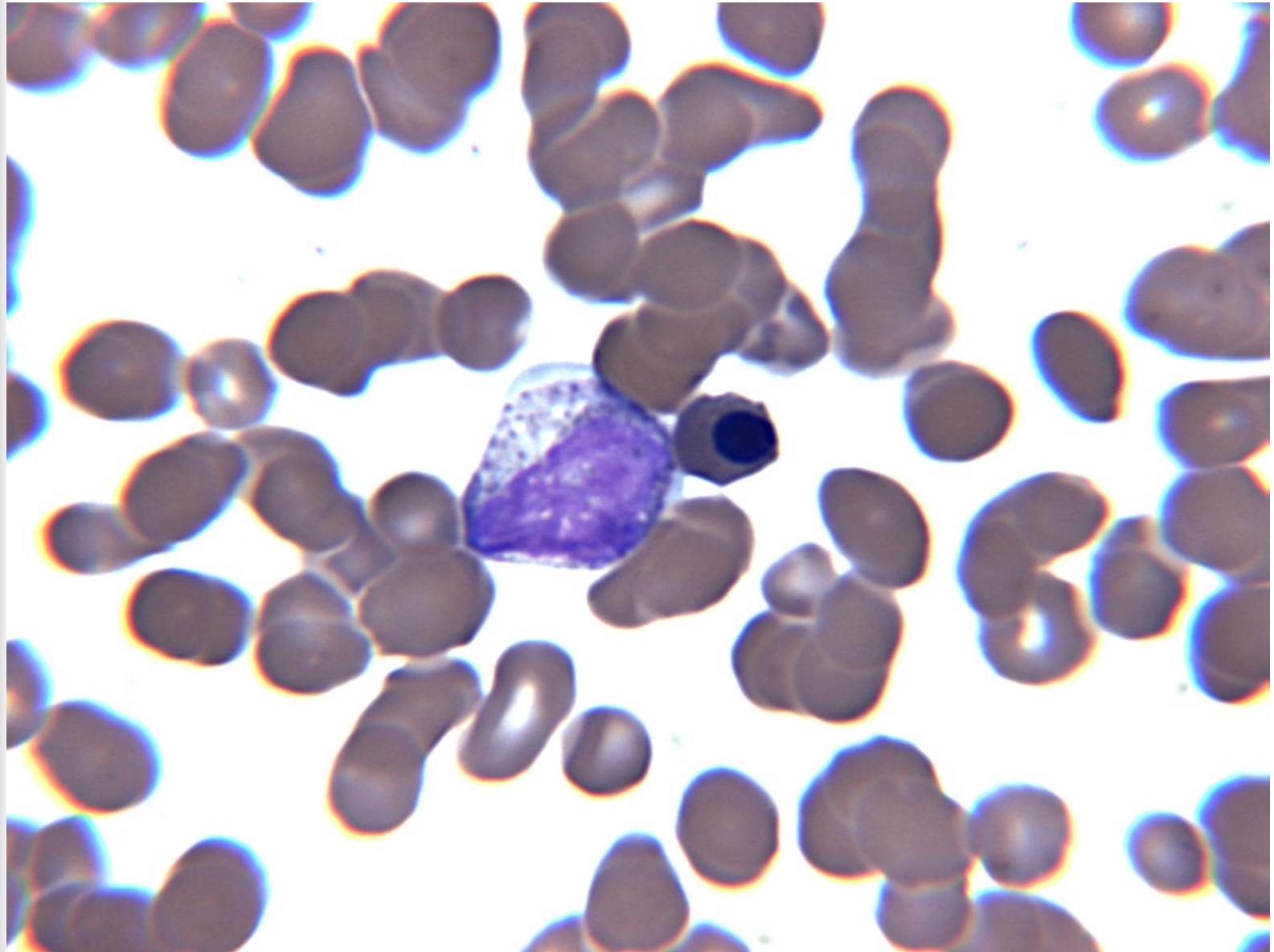
Peripheral Blood Smear (cont'd)



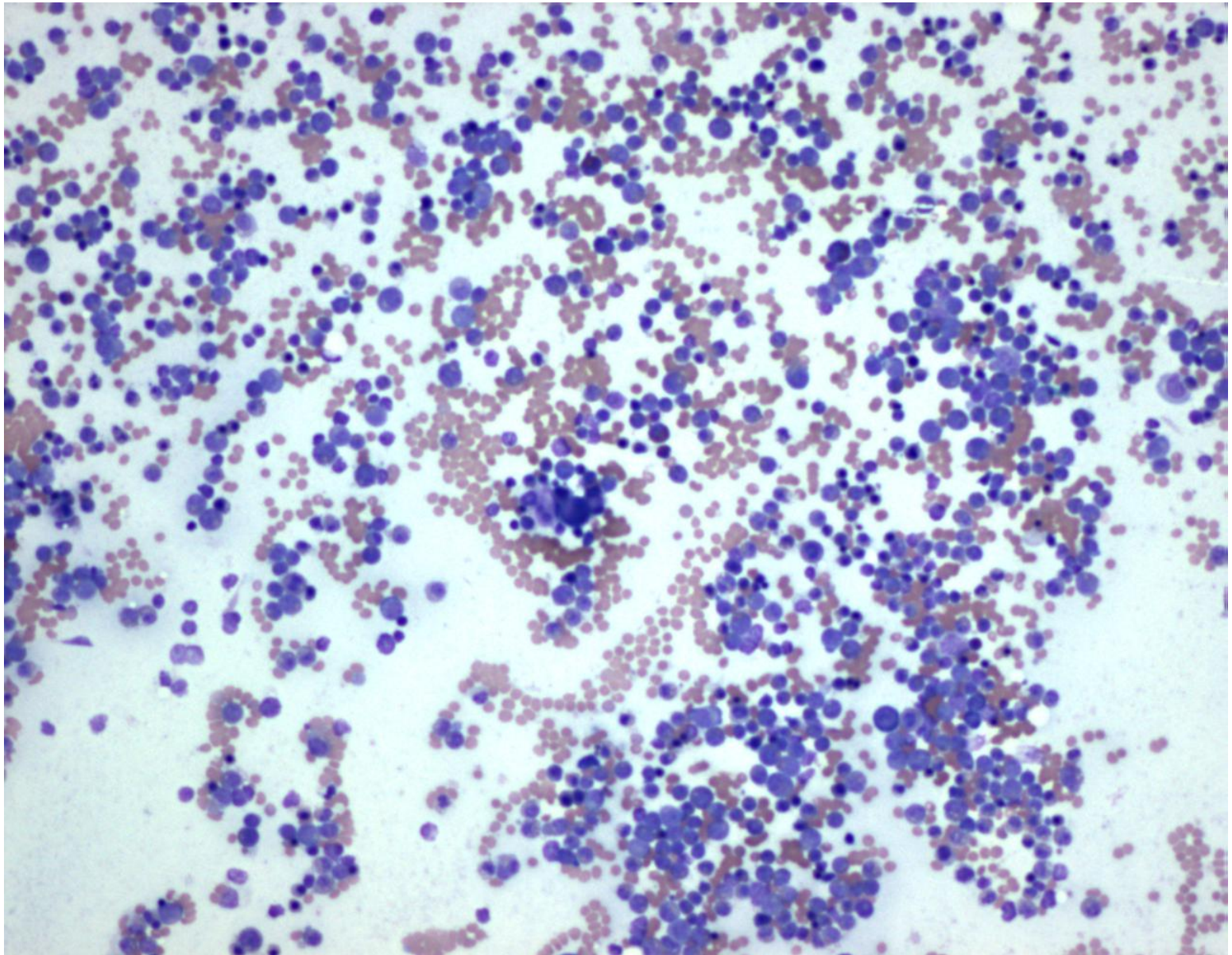
Peripheral Blood Smear (cont'd)



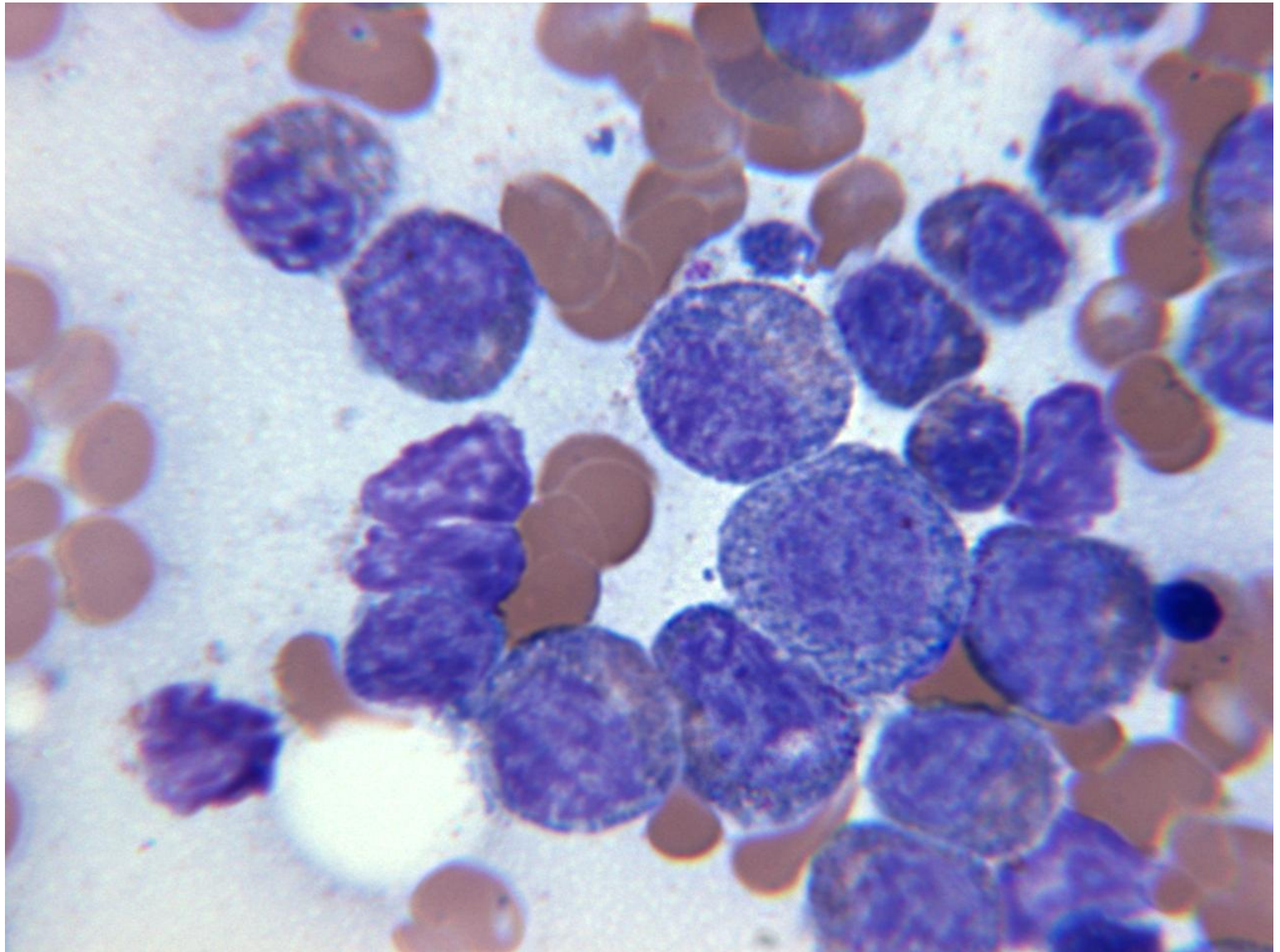
Peripheral Blood Smear (cont'd)



Aspirate Smear

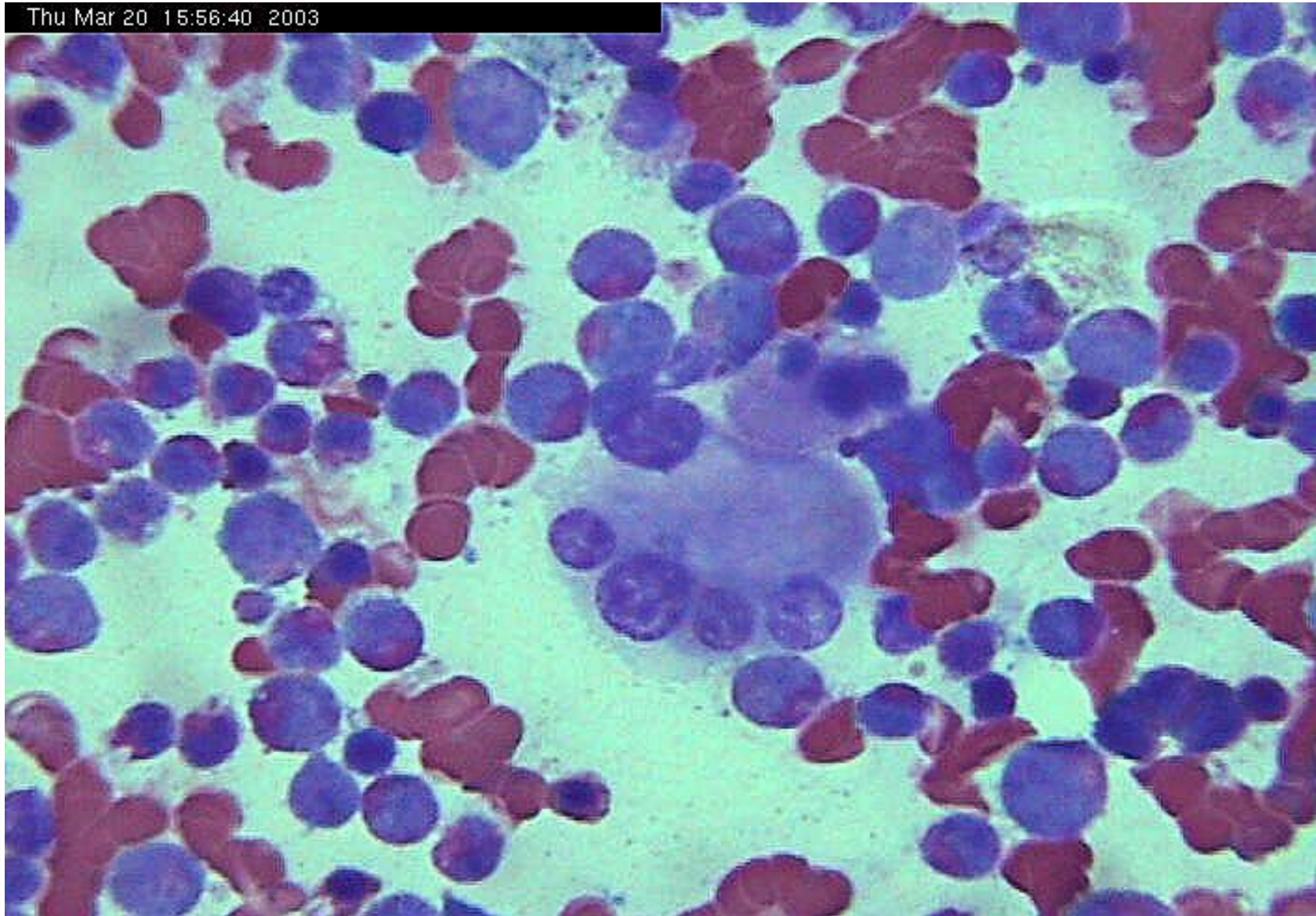


Aspirate Smear (cont'd)



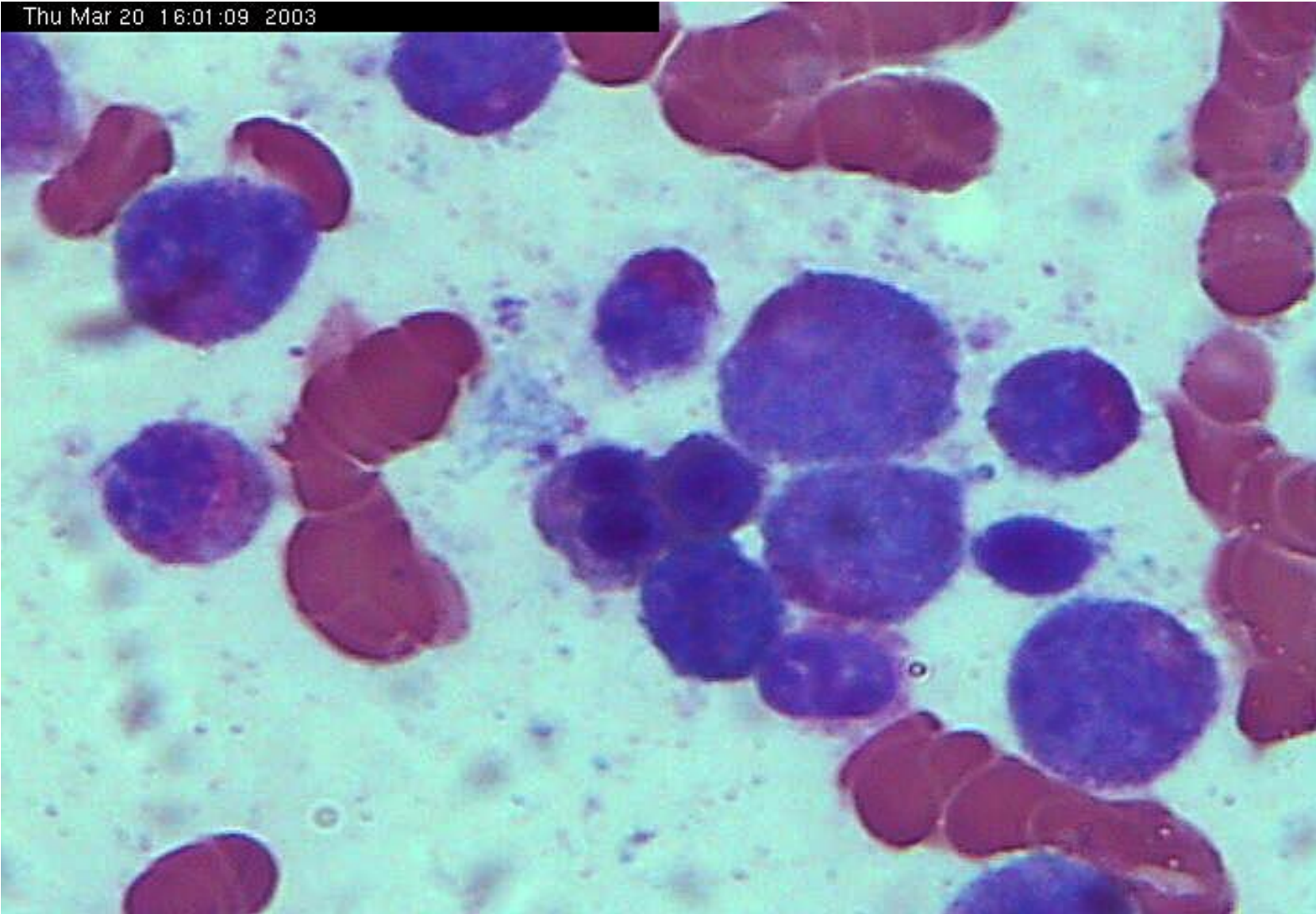
Aspirate Smear (cont'd)

Thu Mar 20 15:56:40 2003

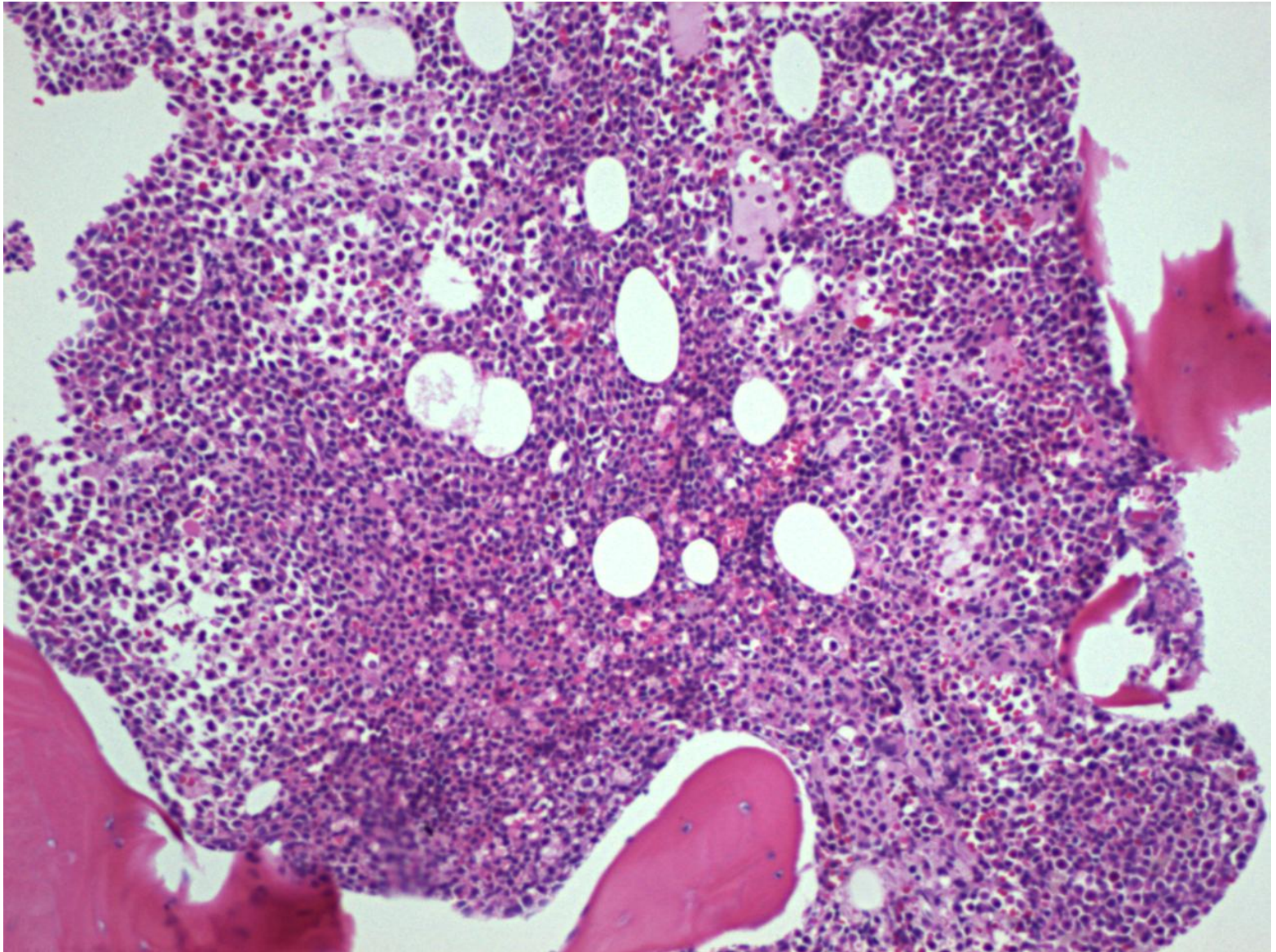


Aspirate Smear (cont'd)

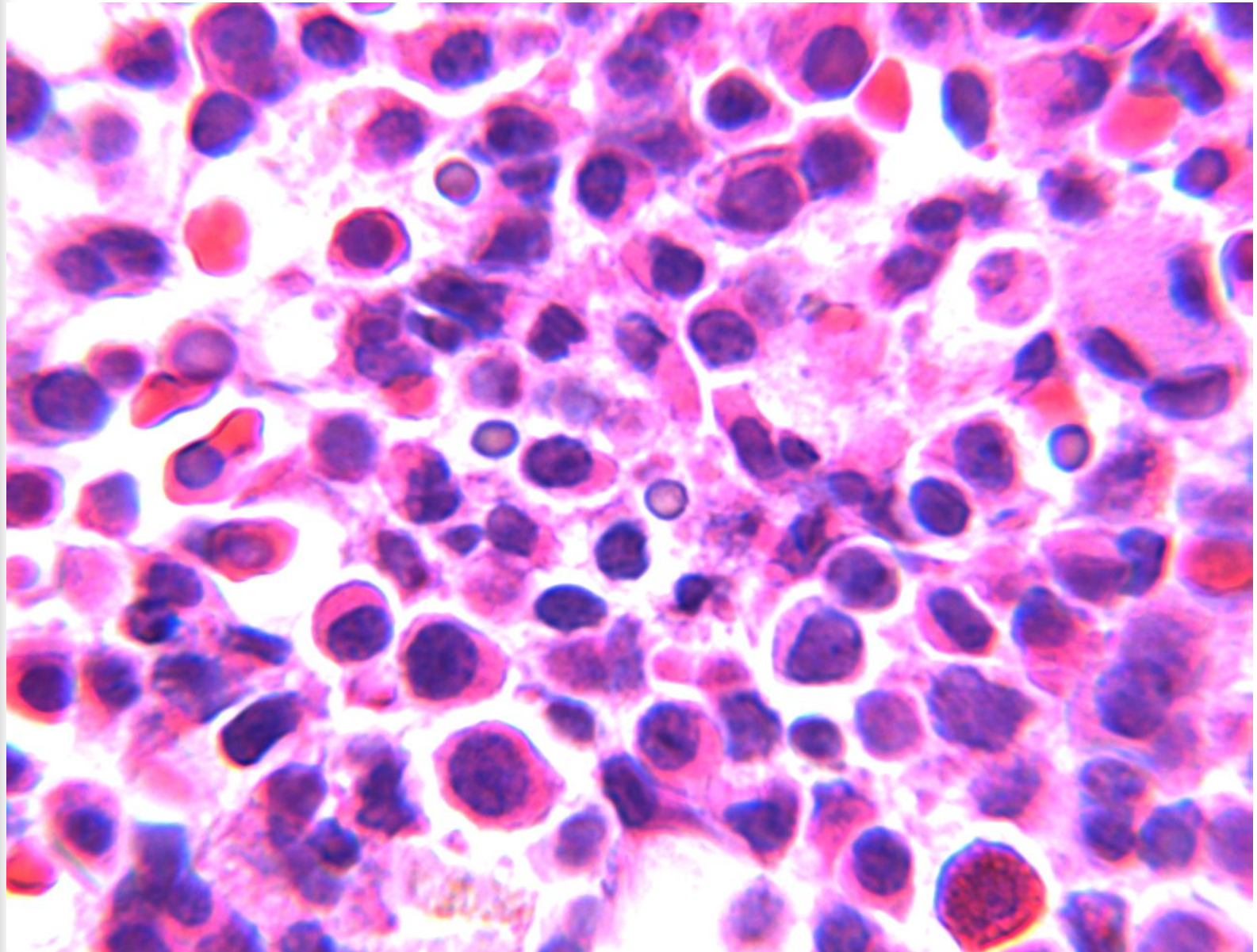
Thu Mar 20 16:01:09 2003



Biopsy



Biopsy (cont'd)





Diagnosis

- Differential Dx: myeloproliferative disorder (CML, CMML, atypical CML), severe leukemoid reaction
- Cytogenetics: positive for del 20q-> atyp CML
- Atyp CML:
 - (1) Leukocytosis with left shift, abnormal condensed chromatin, no basophilia, no monocytosis
 - (2) Hypercellular bone marrow with dysplasia
 - (3) No Ph chromosome
 - (4) 80% with chromosome abnormalities (del 20q, +8, +13, inv 17q, del 12p)
 - (5) Median survival 20 months, poor prognosis with anemia and thrombocytopenia

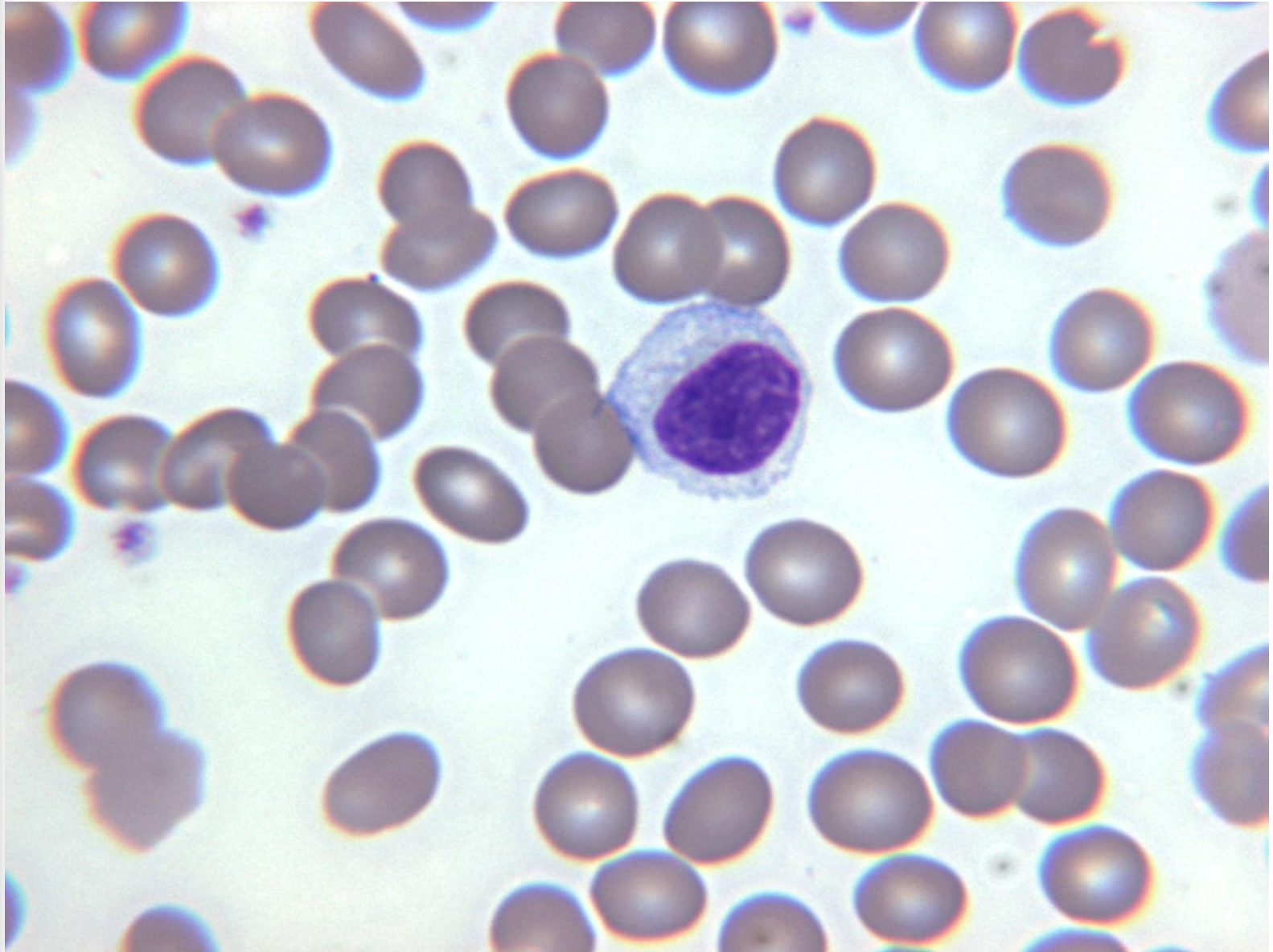


HB-03-30

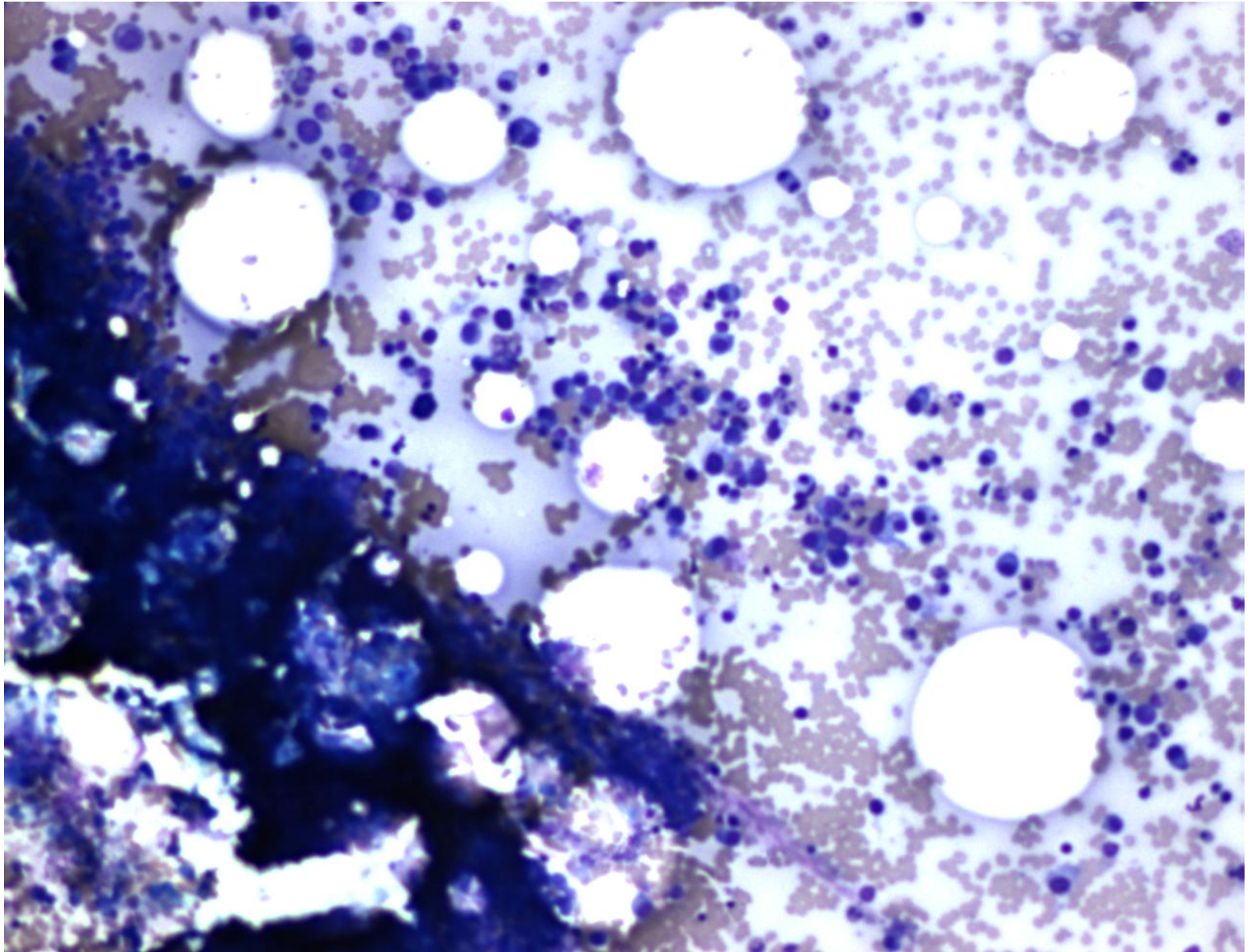
Patient Name: SMOXXXX, LINXXXX

- 72 year old male with monoclonal gammopathy (IgG-kappa, serum IgG=3.5 g/dL), reduced immunoglobulins IgM and IgA; X-ray shows lytic bone lesions.
- WBC=3.7, Hgb=12.7, Plt=163,000, MCV=82.8
Seg 47, Lymph 39, Mono 13, Baso 1
- Bone marrow aspirate: PC 34, Promyelo 1.5, Myelo 8, Meta 9.5, PMN&band 20, Eos 1.5, Mono 1.5, Lymph 11, RBC 13
- Bone marrow biopsy: 15% cellularity

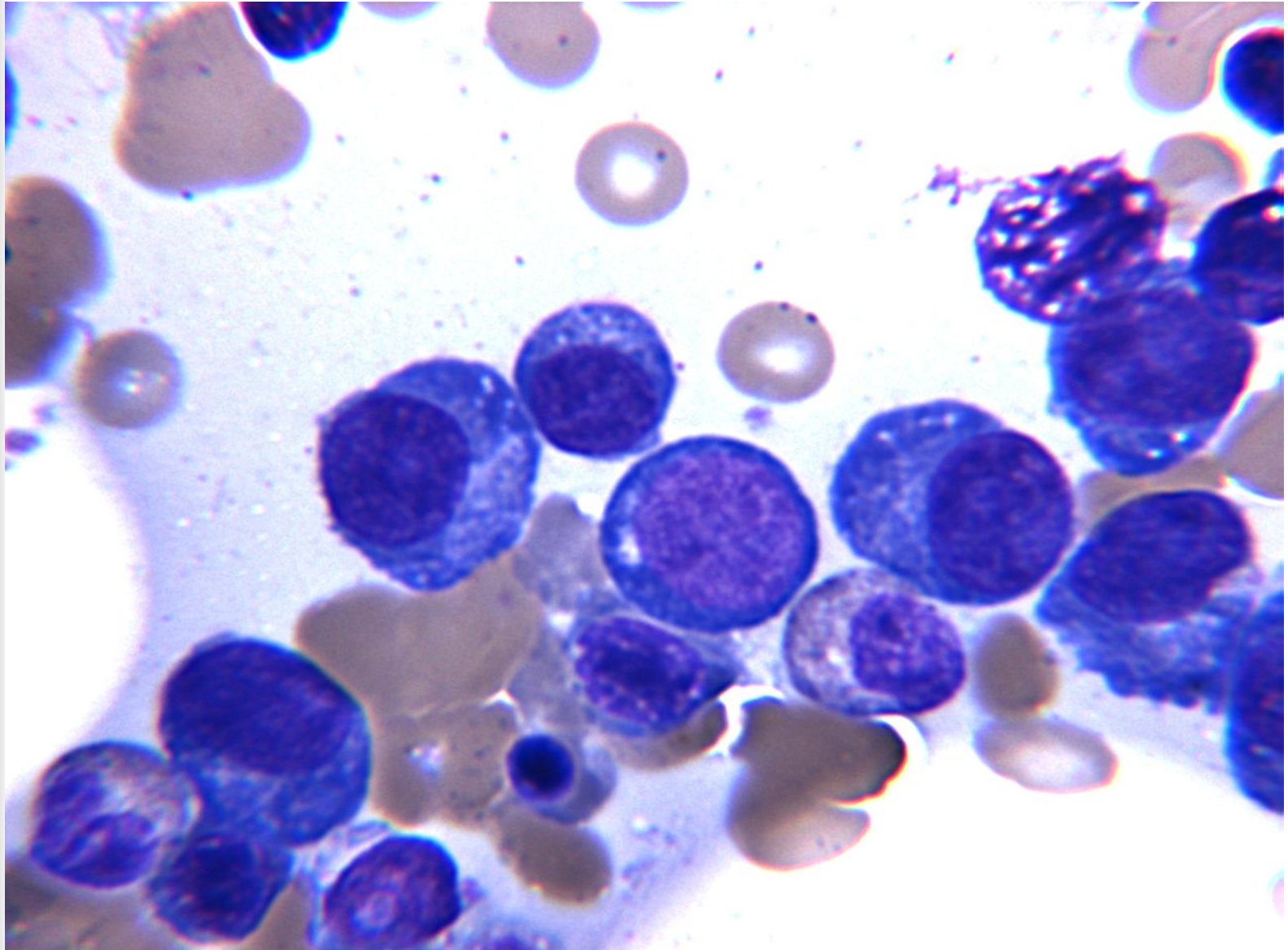
Peripheral Blood Smear



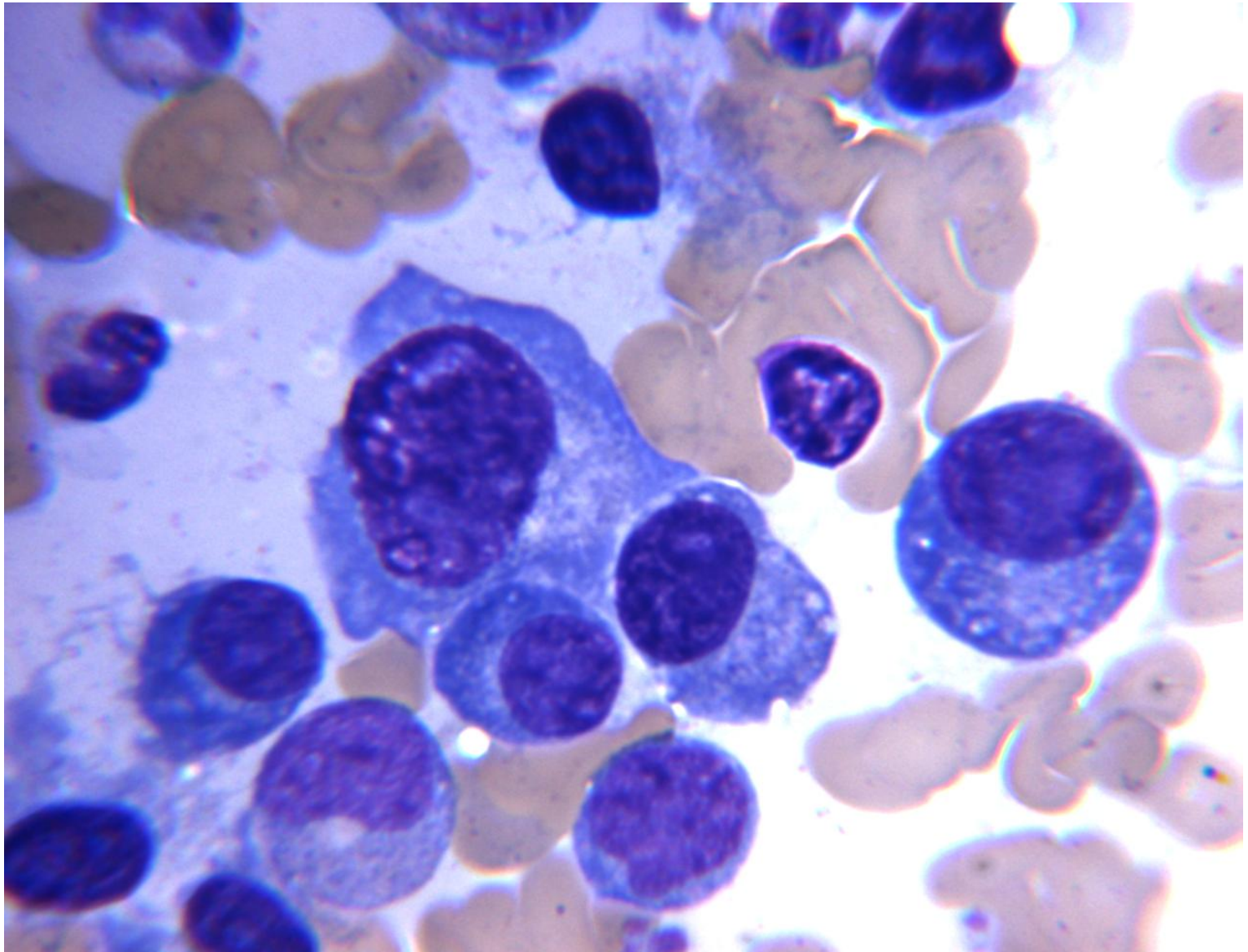
Aspirate Smear



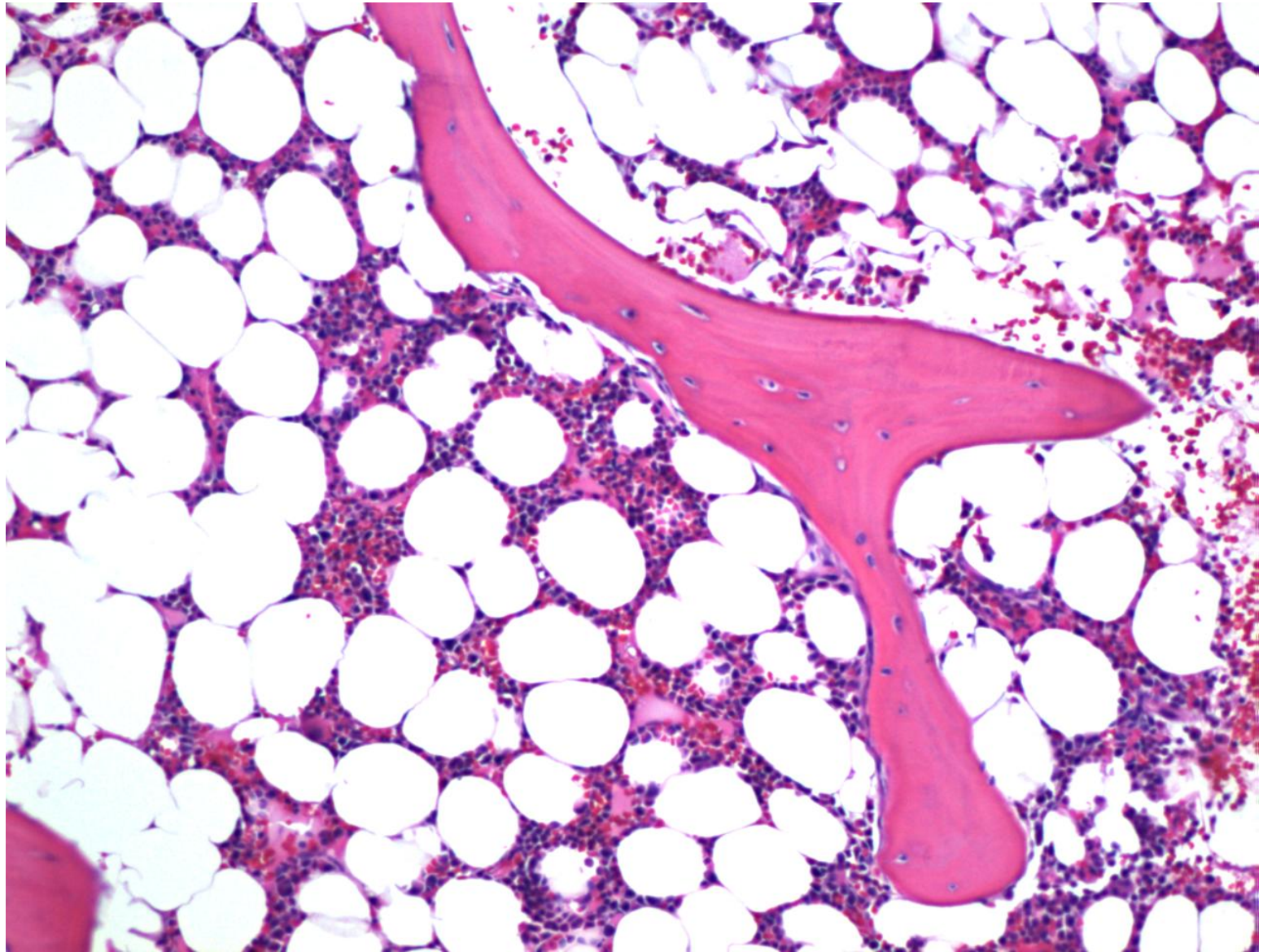
Aspirate Smear (cont'd)



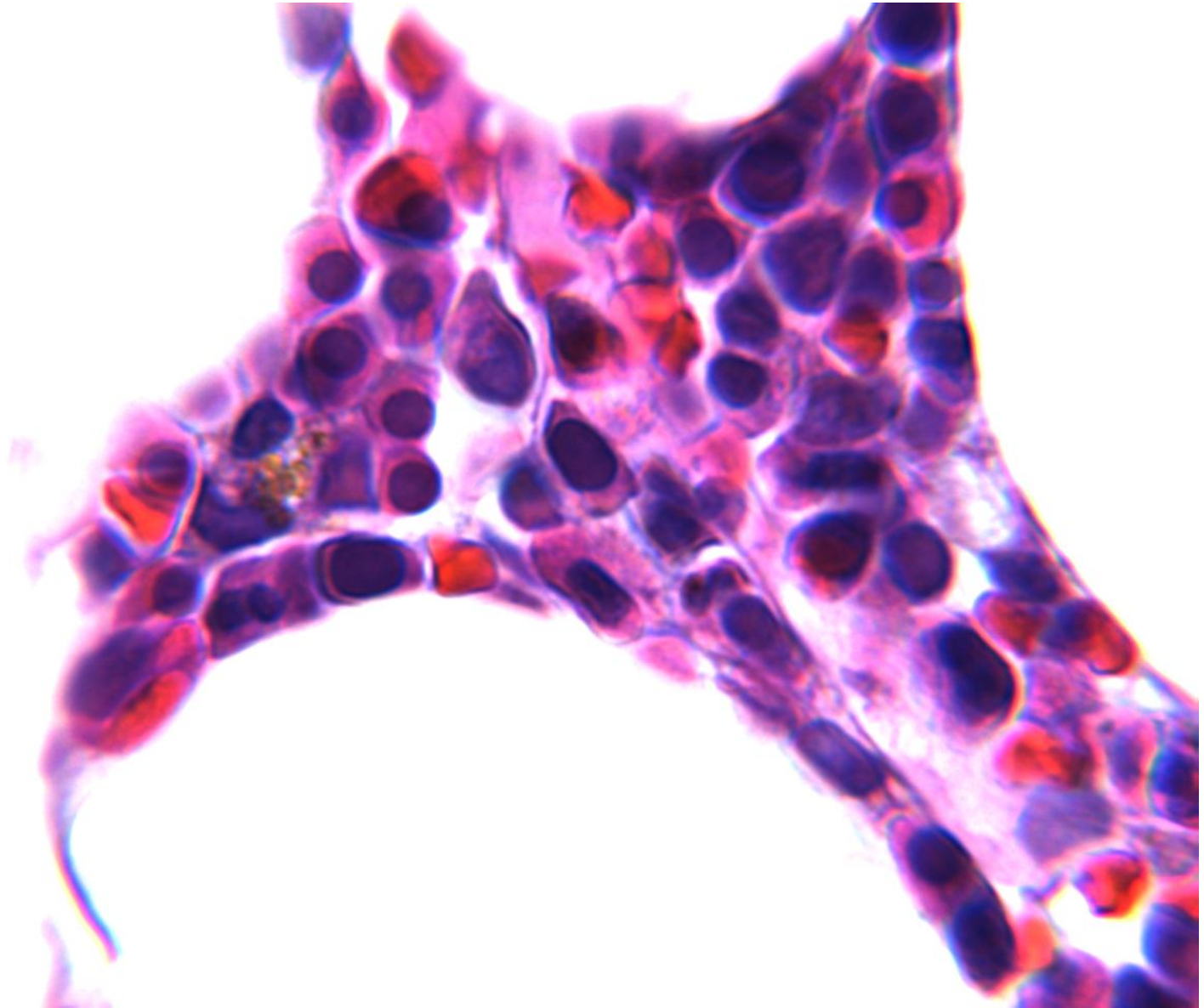
Aspirate Smear (cont'd)



Biopsy



Biopsy (cont'd)

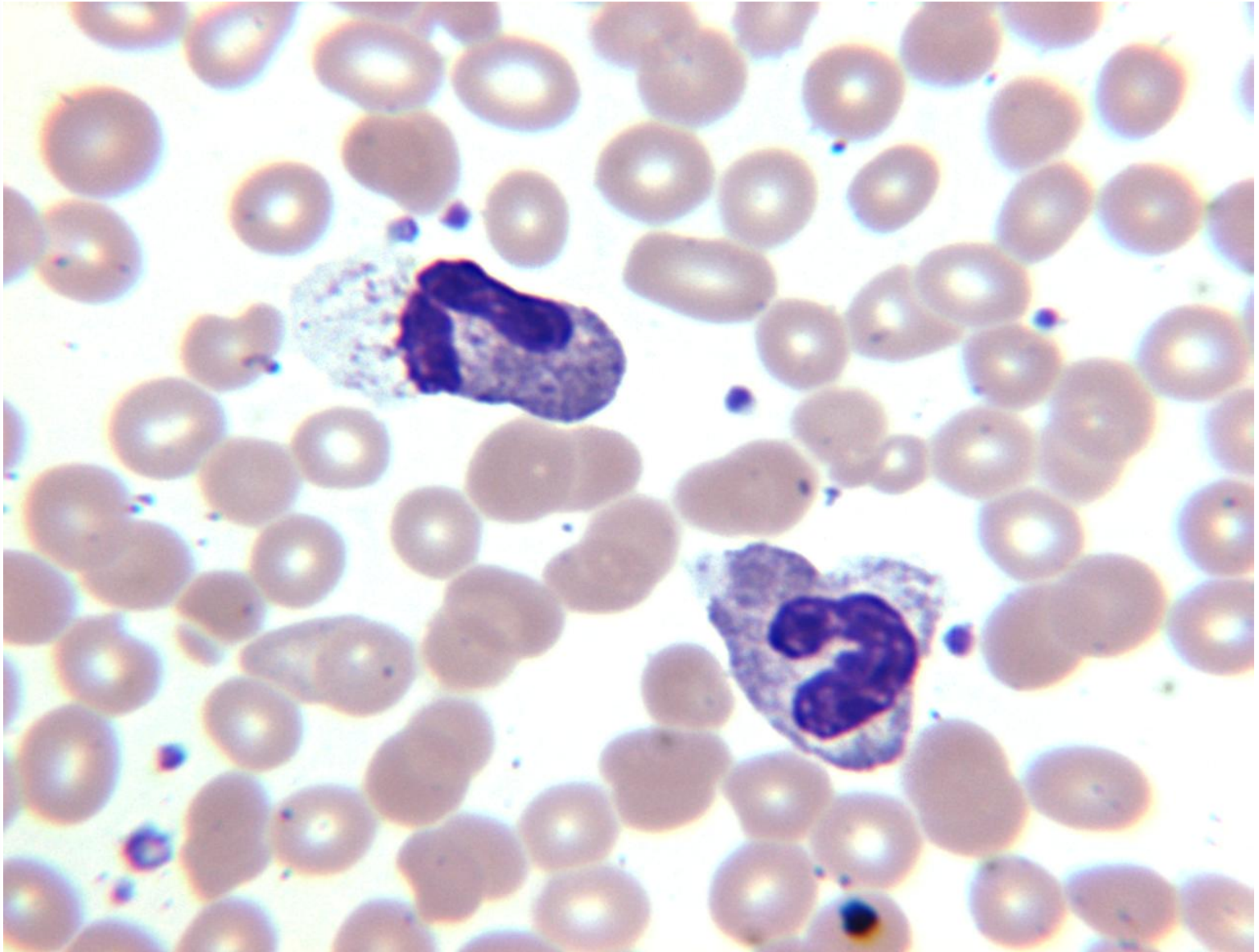




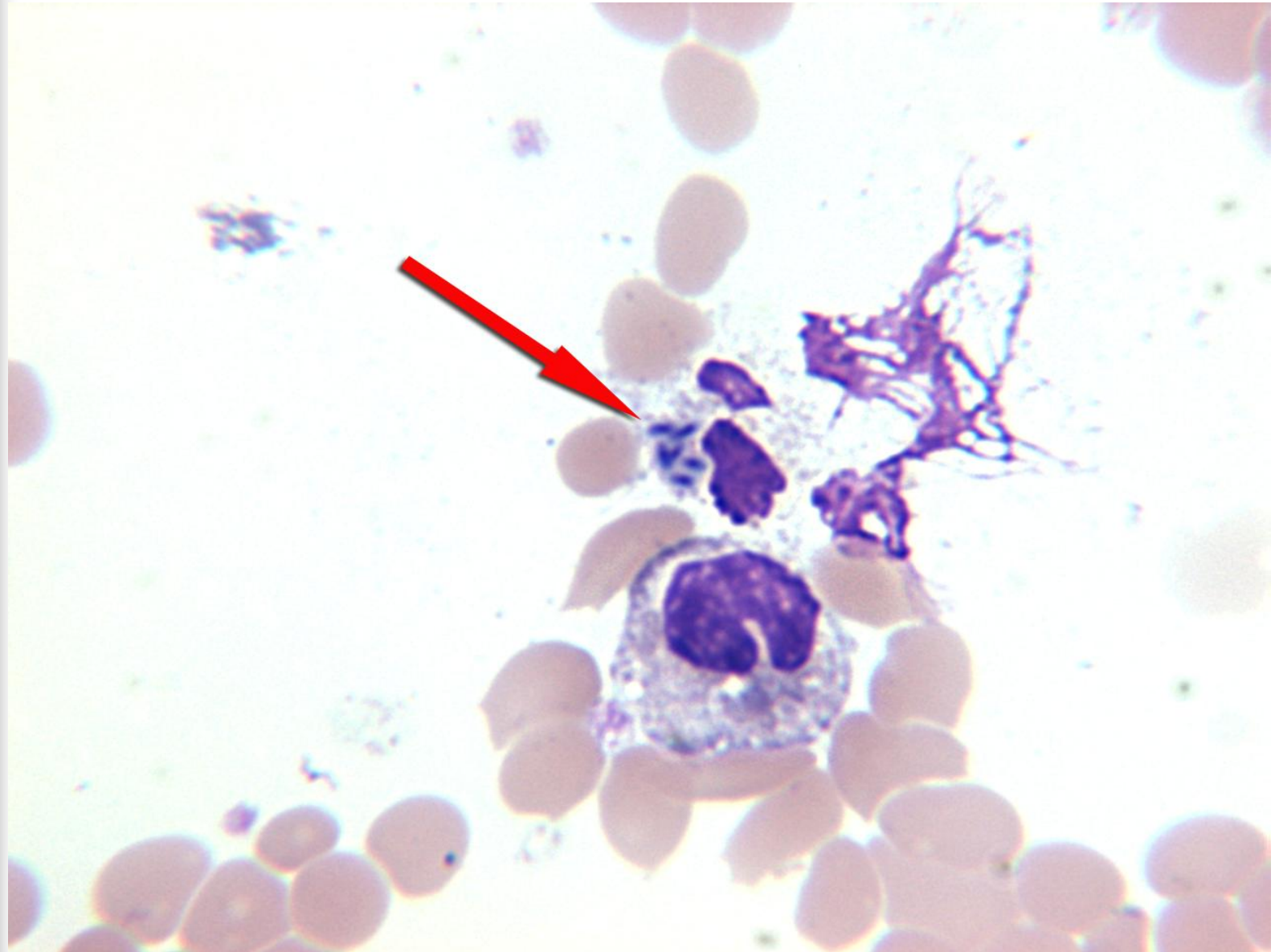
Patient Name: Rosxxxx Rosxxxx

- 31 year old female with history of NS-Hodgkin lymphoma, S/P therapy, presented with fever
- WBC 25.8, Hgb=7.81, Plt=390,000, MCV=65.9, MCH=20.7
Seg 88, Band 1, Lymph 10, Mono 1

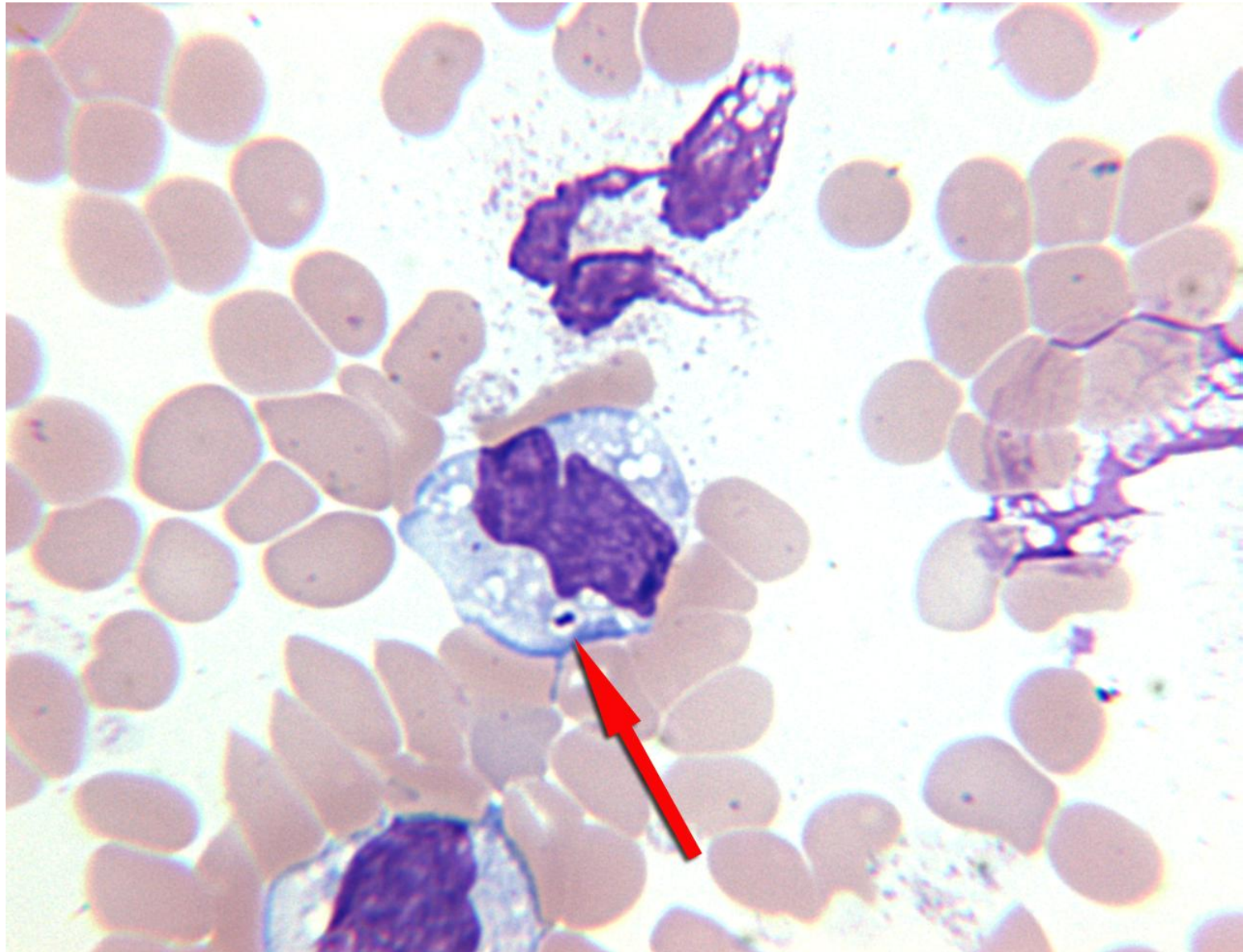
Peripheral Blood Smear



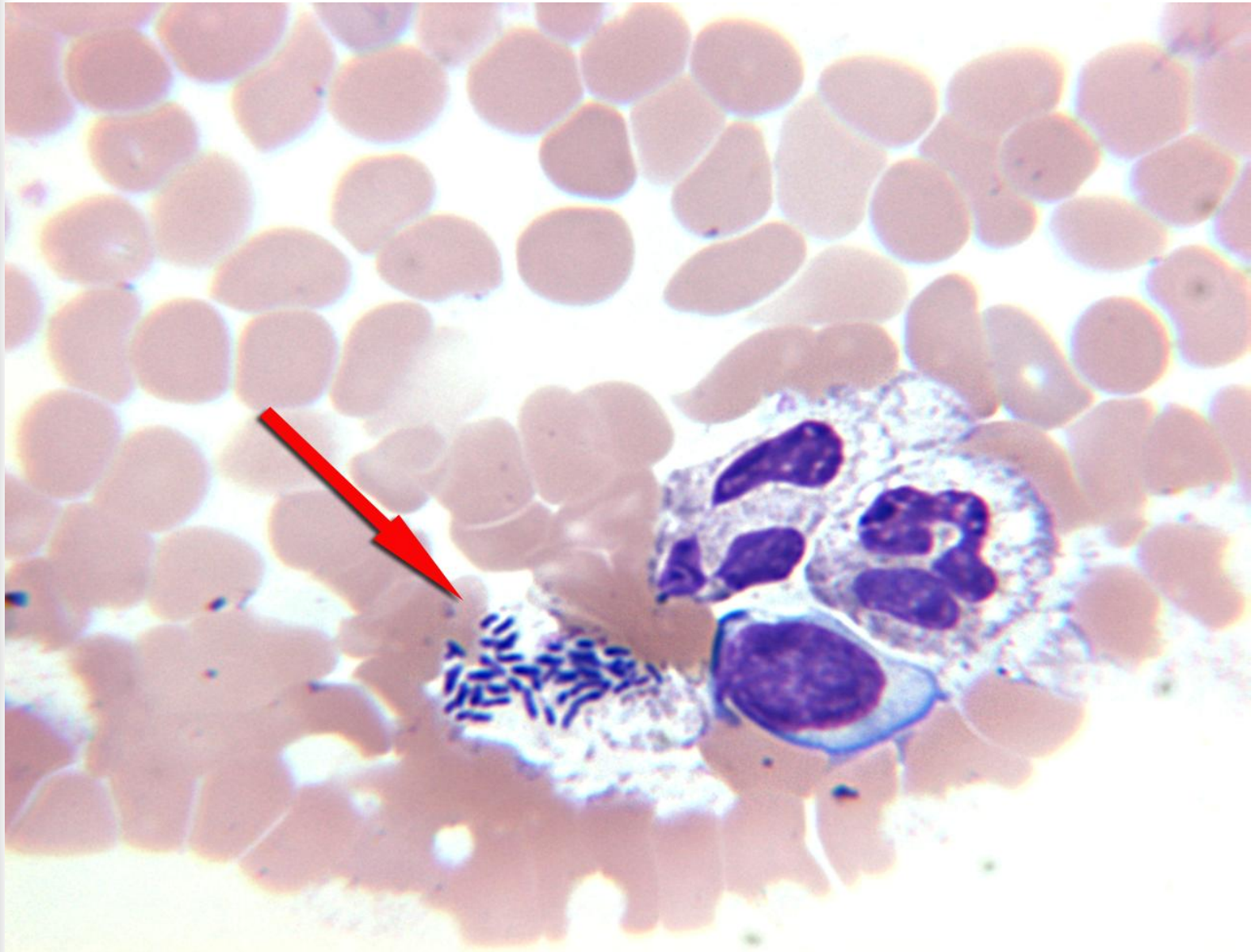
Peripheral Blood Smear (cont'd)



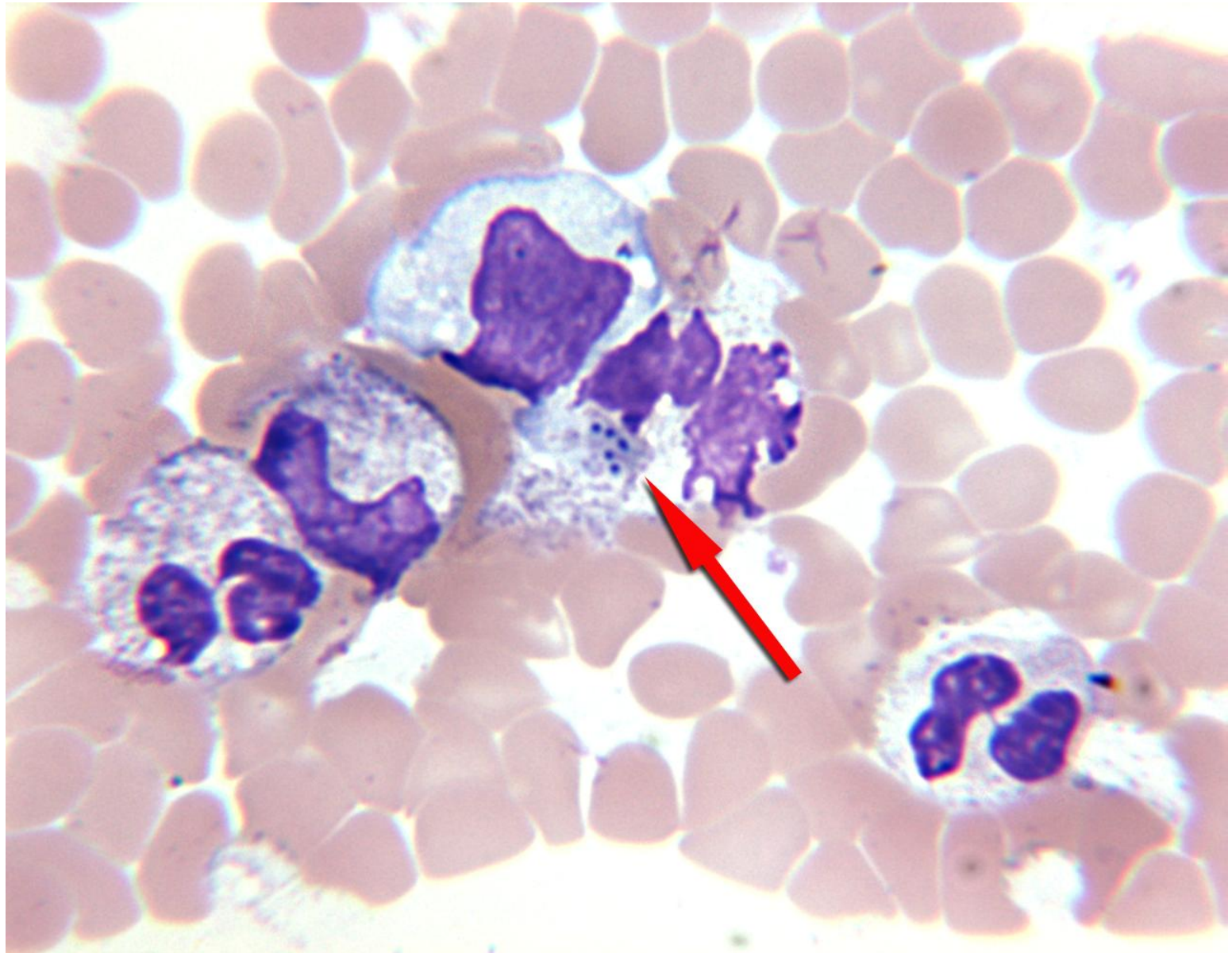
Peripheral Blood Smear (cont'd)



Peripheral Blood Smear (cont'd)



Peripheral Blood Smear (cont'd)



Peripheral Blood Smear (cont'd)





Blood Culture

- Results are available after findings in blood smear:
 - (1) Gr(-) bacilli: *Enterobacter aerogenes*
 - (2) Gr(+) cocci: *Gr D. enterococcus*
- *Enterobacter aerogenes*: part of normal enteric flora, can cause opportunistic infections (urinary, respiratory, cutaneous, occasionally sepsis and meningitis)
- *Gr D. enterococcus*: part of normal enteric flora, can cause: urinary tract infection, pelvic abscess, peritonitis, wound infection, endocarditis, and sepsis
- Bacteria in peripheral blood smear is uncommon even in patients with pos blood cultures. Small series did not show fatality in all cases with numerous bacterial inclusions