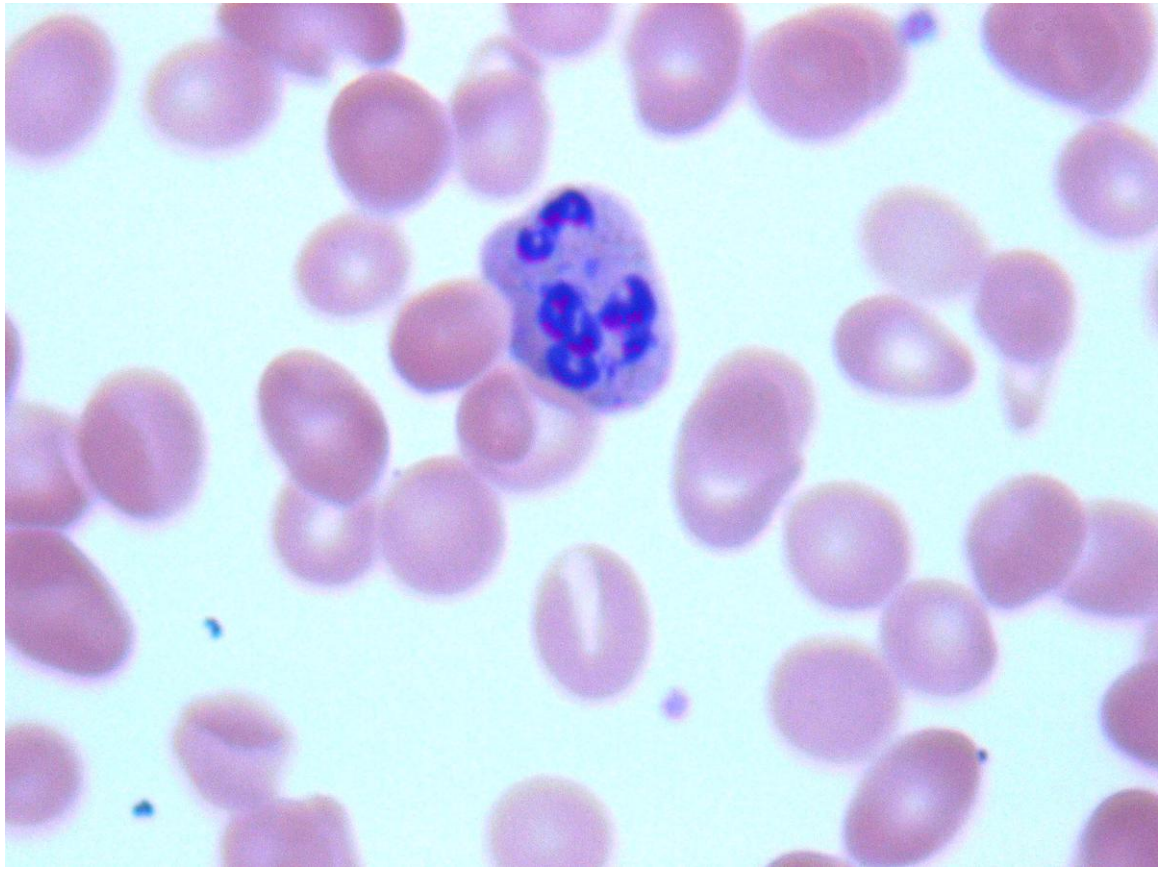
Hematology Case Conference

4/29/03

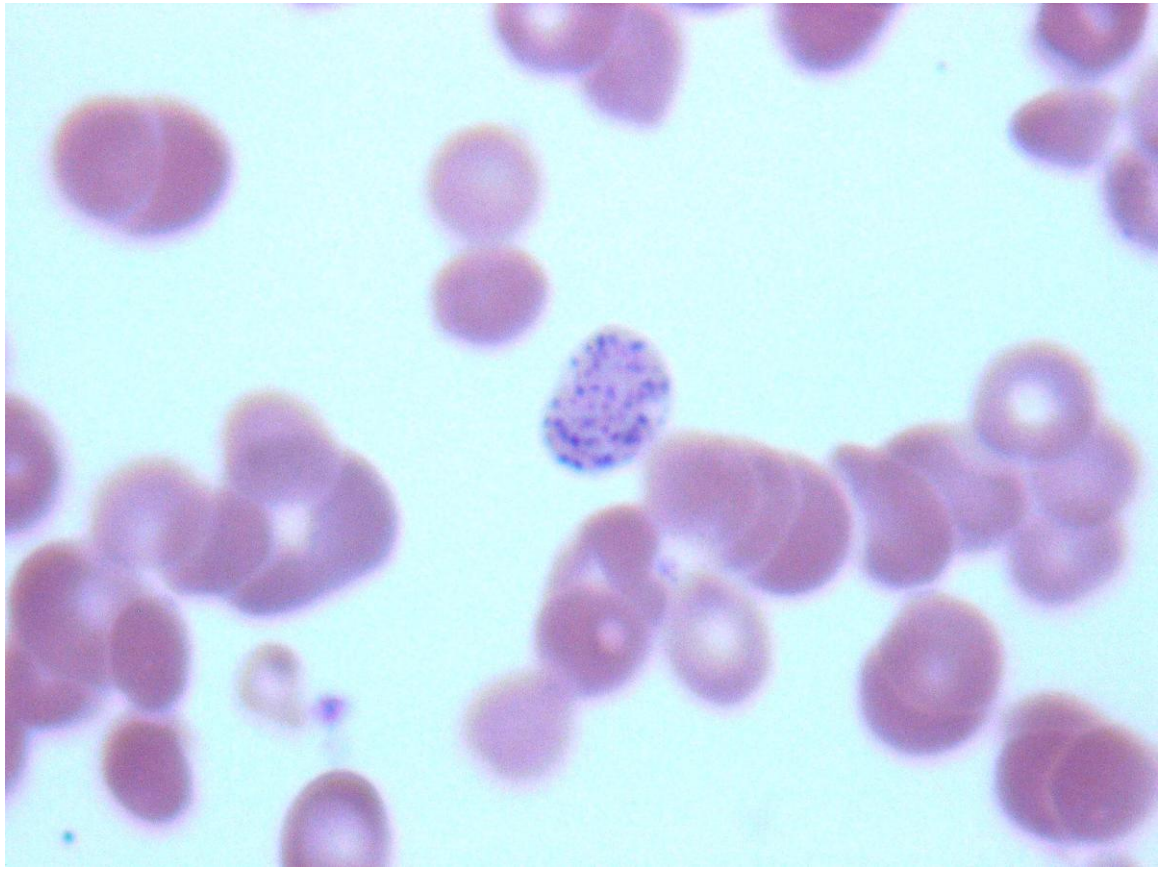
HB-03-44
Patient Name: Gxxx, Jxxx

- 59-year-old woman with weakness, weight loss, and pancytopenia
- WBC= 4.1, Hgb=8.0, Plt=54,000, Retic= 4.2,
  MCV= 99.6
  Seg 62, Band 1, Lymph 36, Mono 1, NRBC 3
- Bone marrow aspirate: RBC 58, M:E 0.55
- Biopsy 95% cellularity

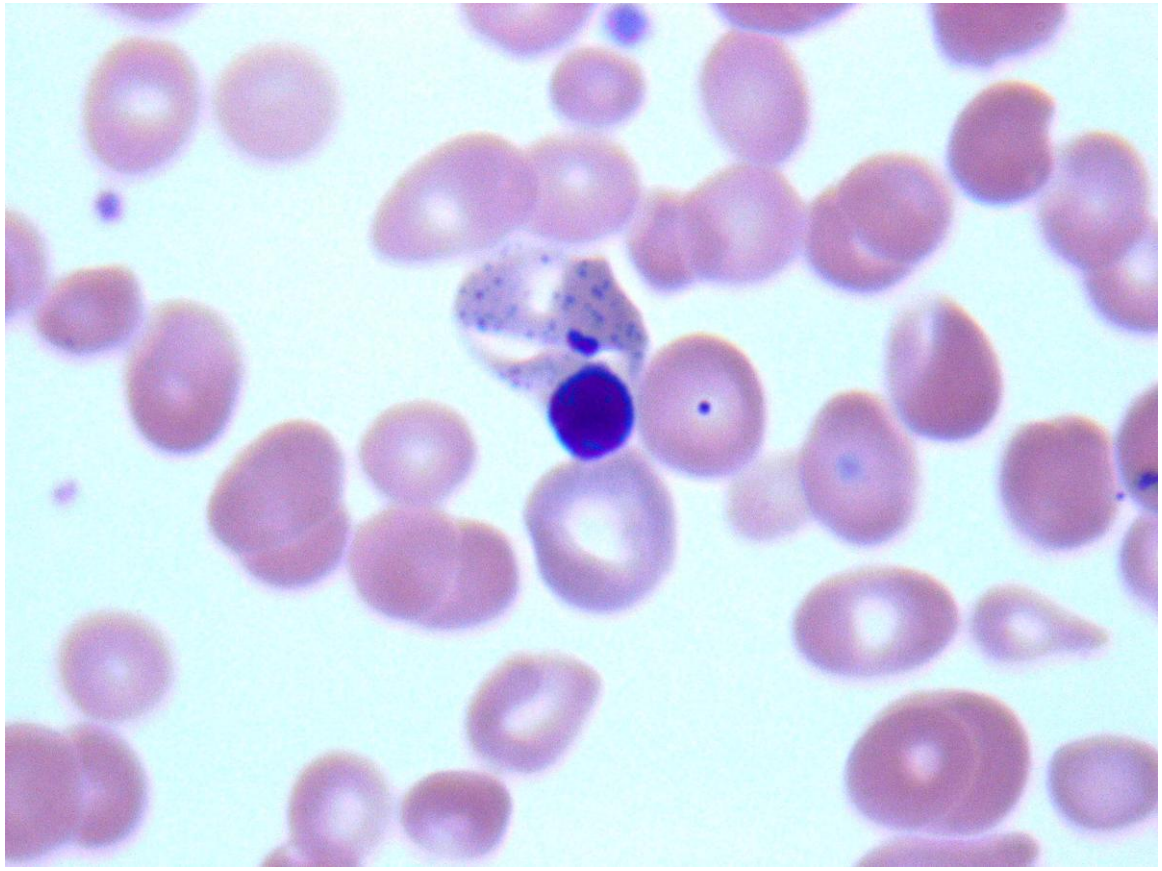
Peripheral Blood Smear (S/P RBC transfusion)



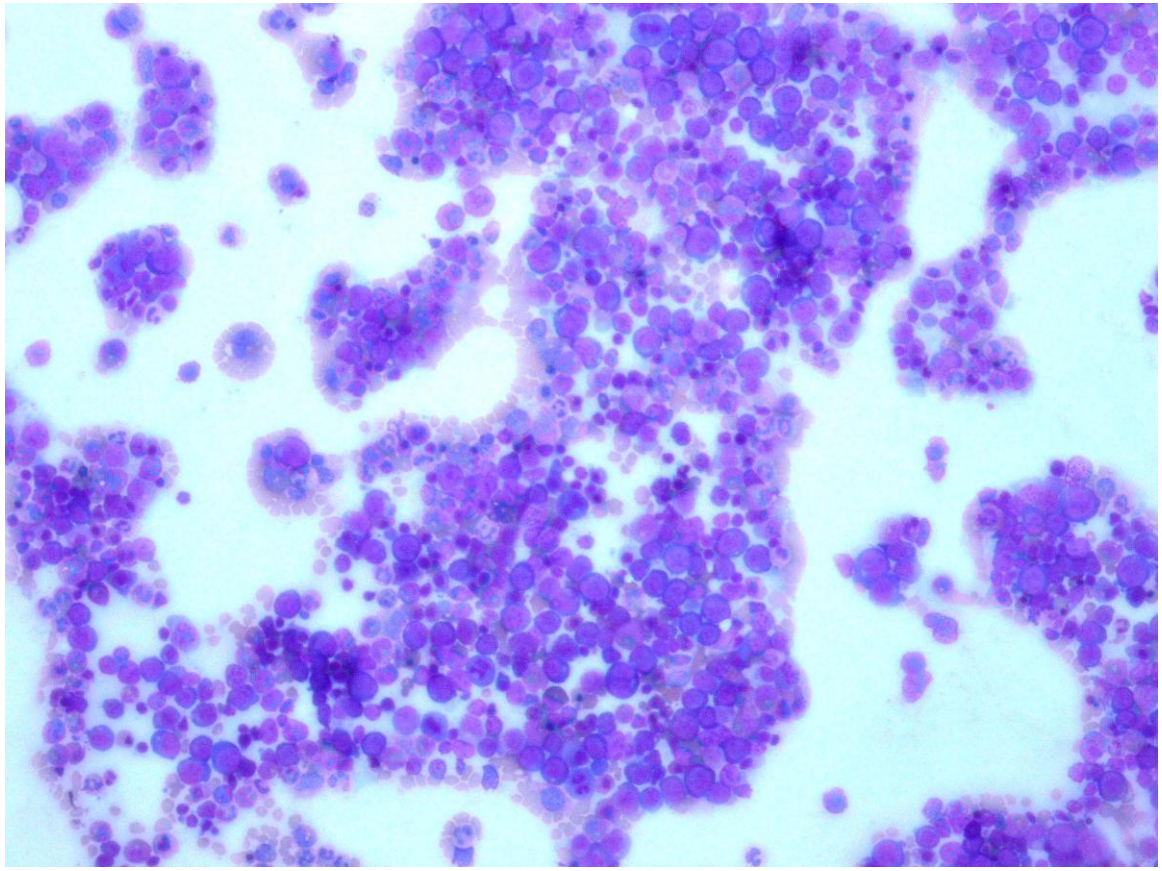
Peripheral Blood Smear (cont'd)



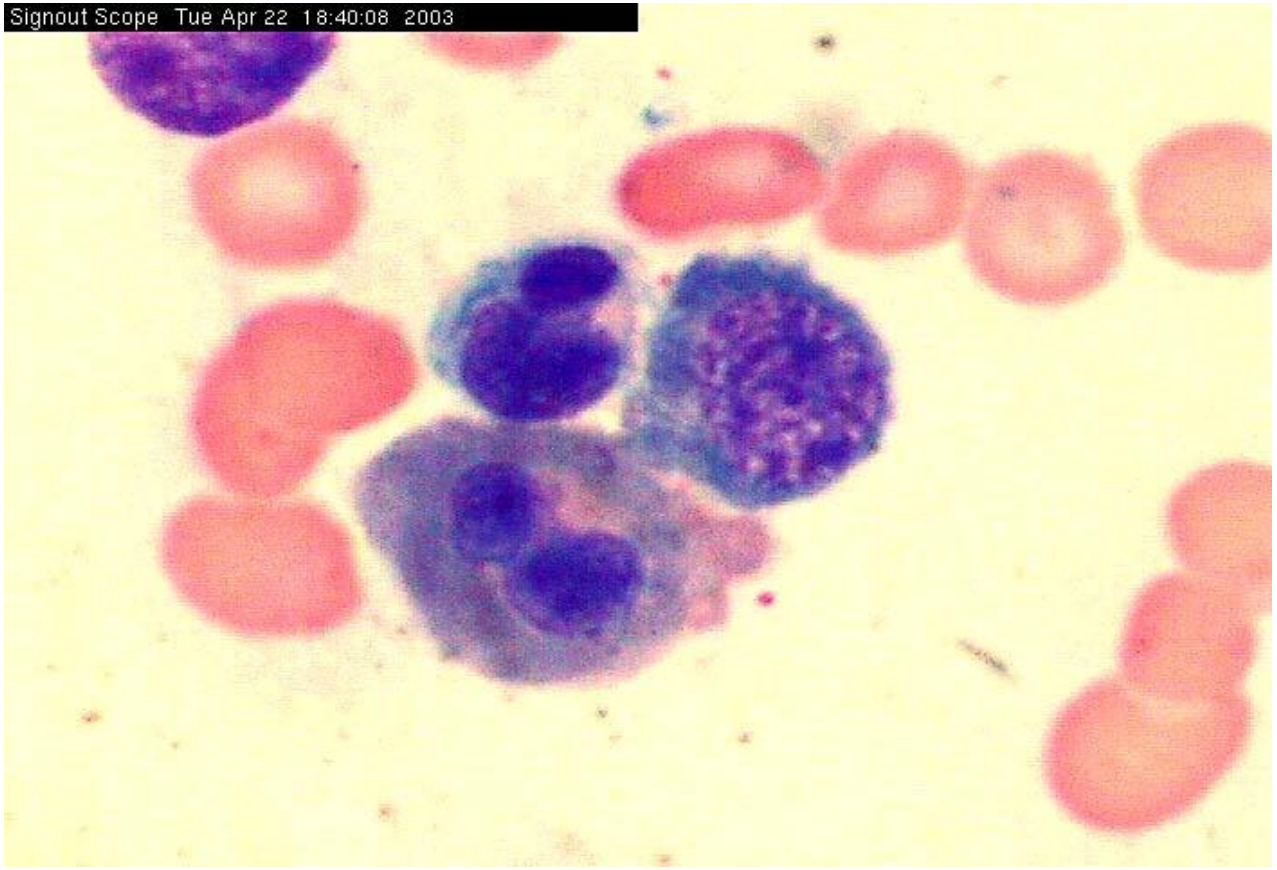
Peripheral Blood Smear (cont'd)



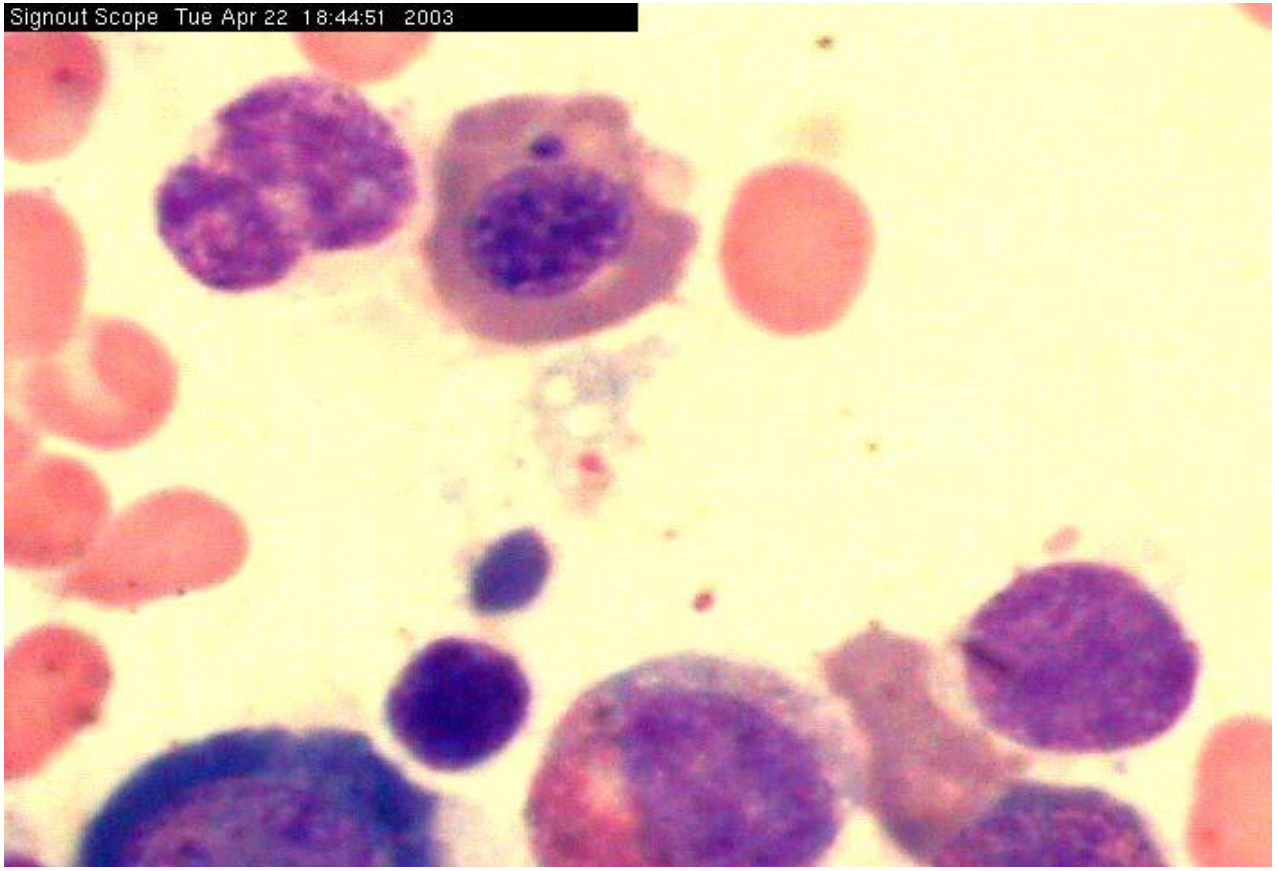
Aspirate Smear



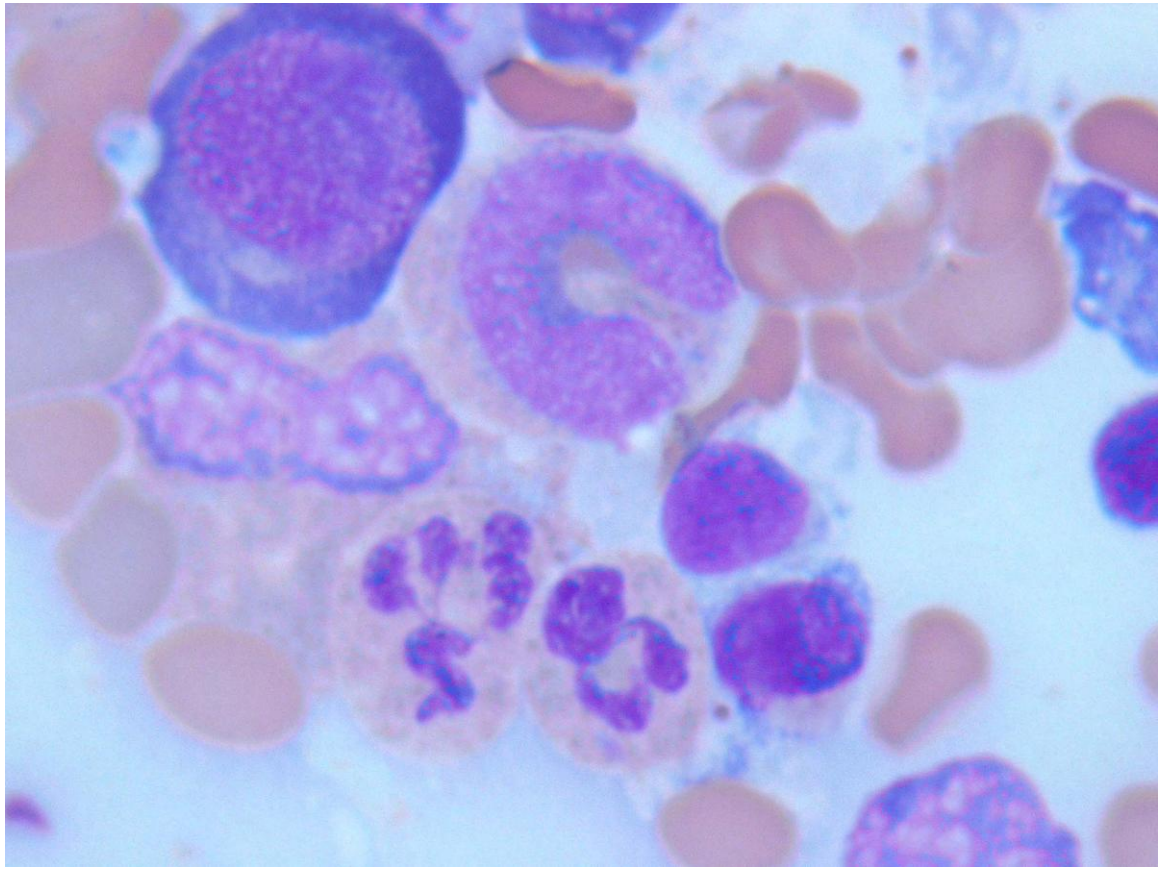
Aspirate Smear (cont'd)



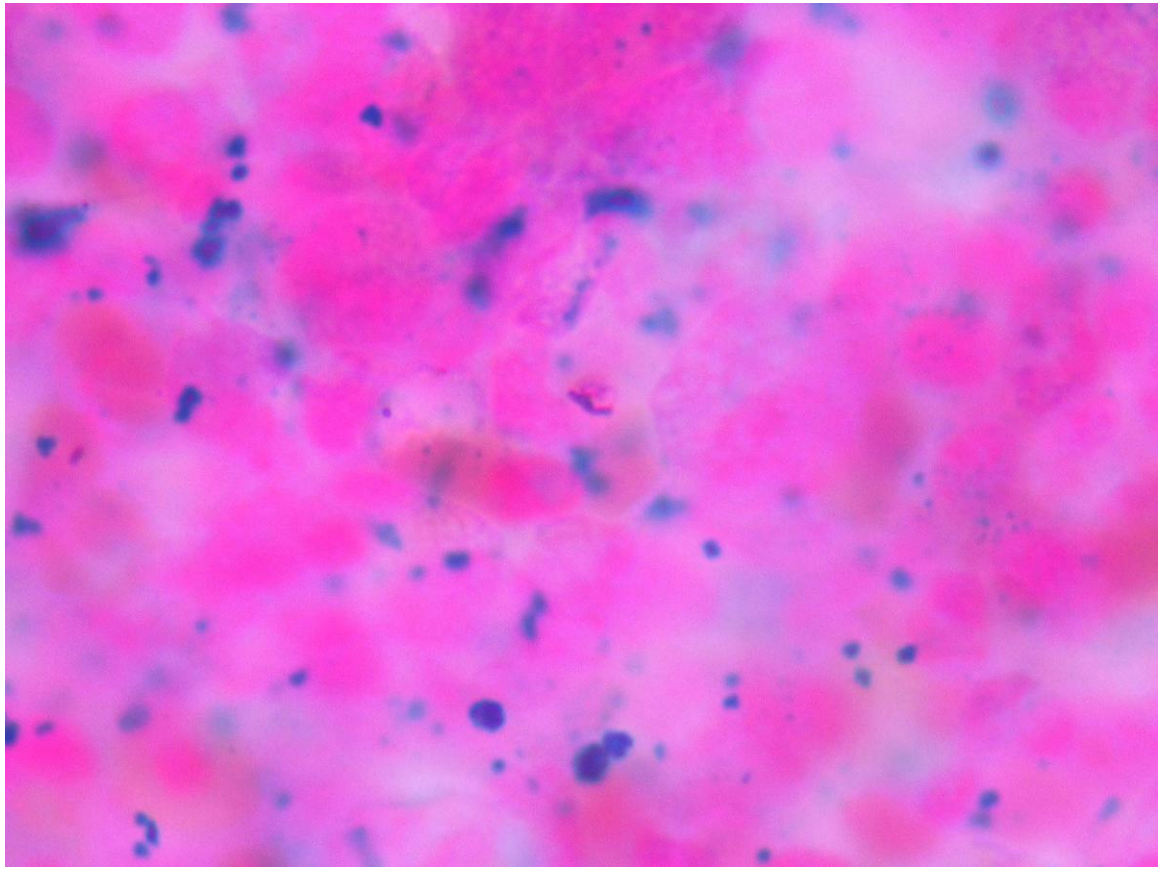
Aspirate Smear (cont'd)



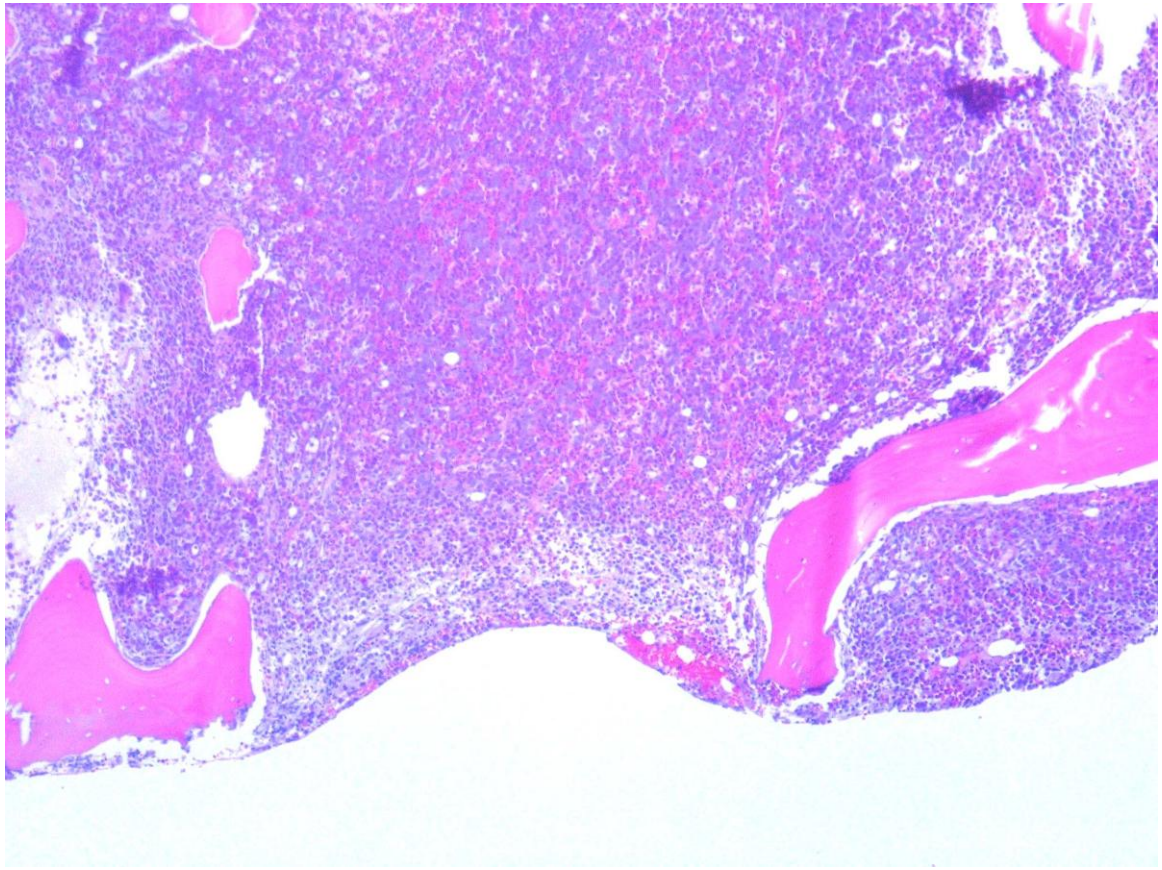
Aspirate Smear (cont'd)



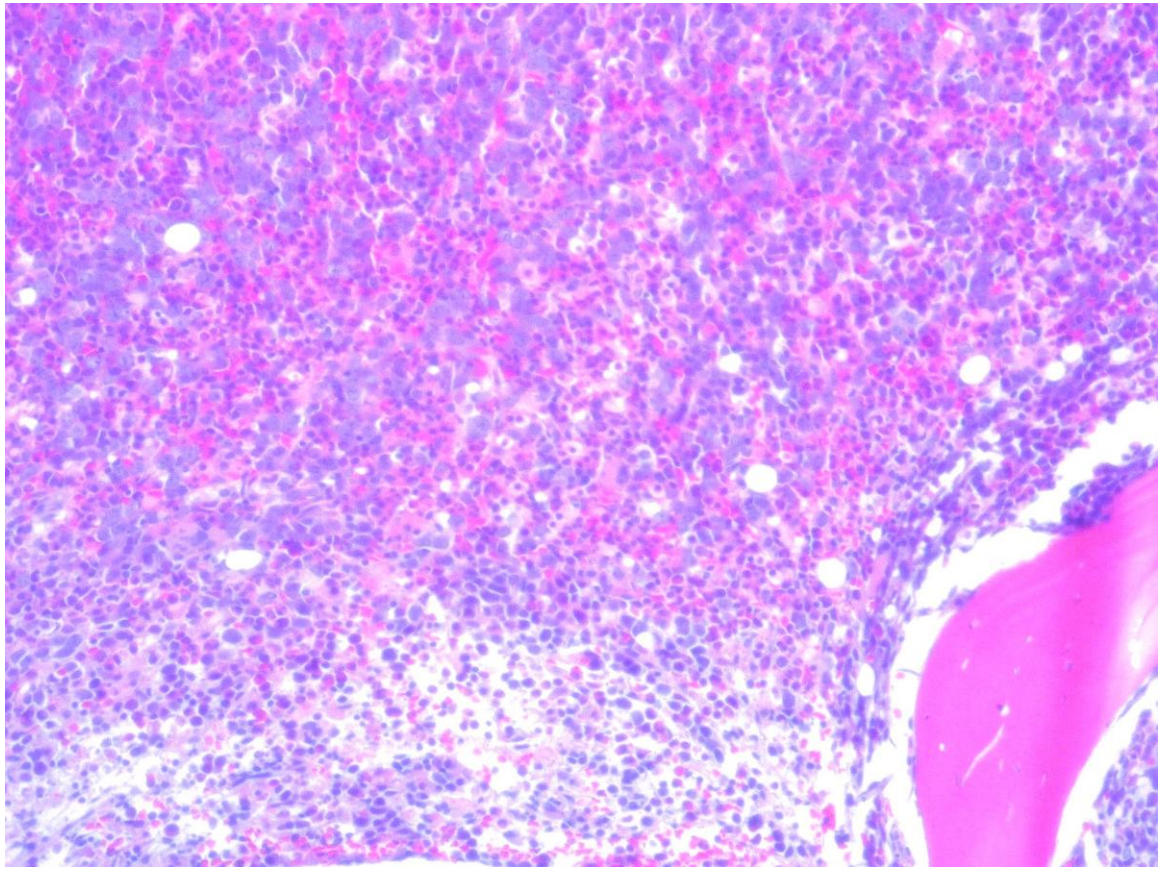
Iron Stain of Aspirate



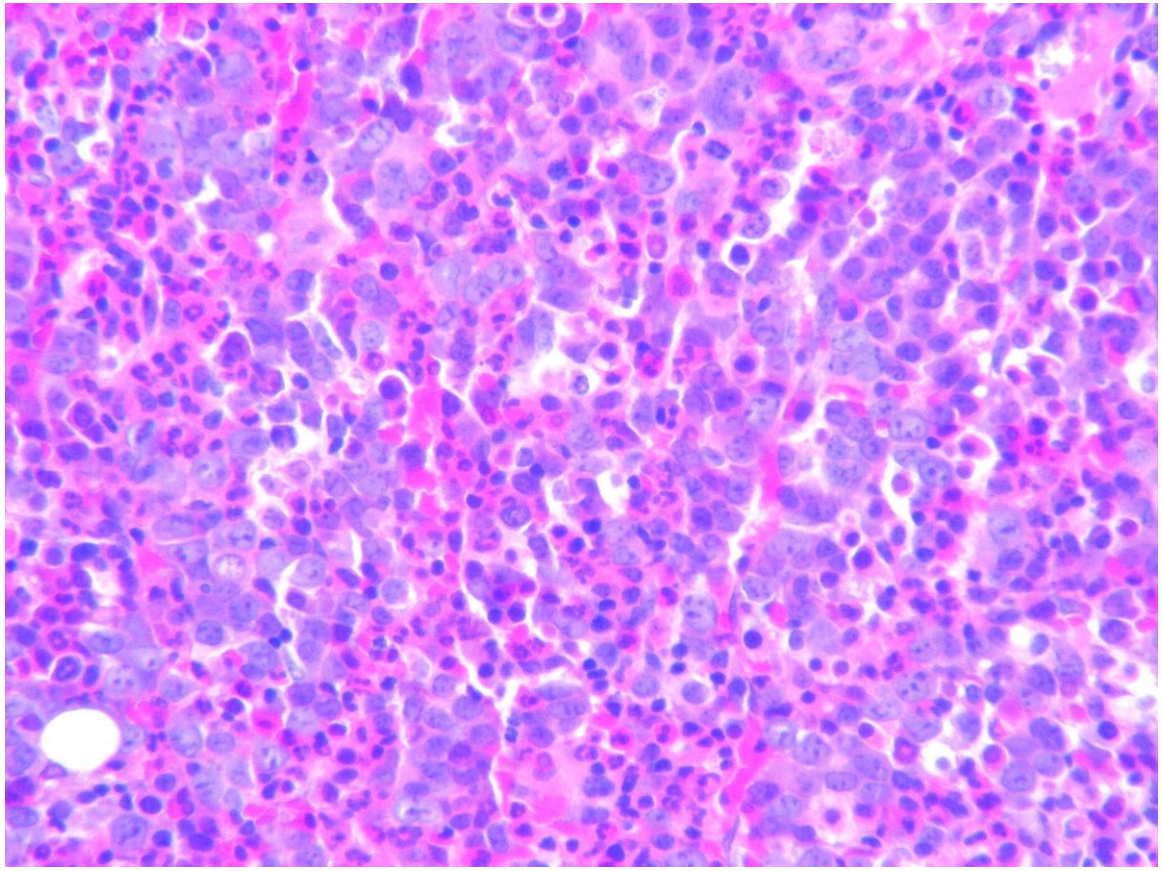
Bone Marrow Biopsy



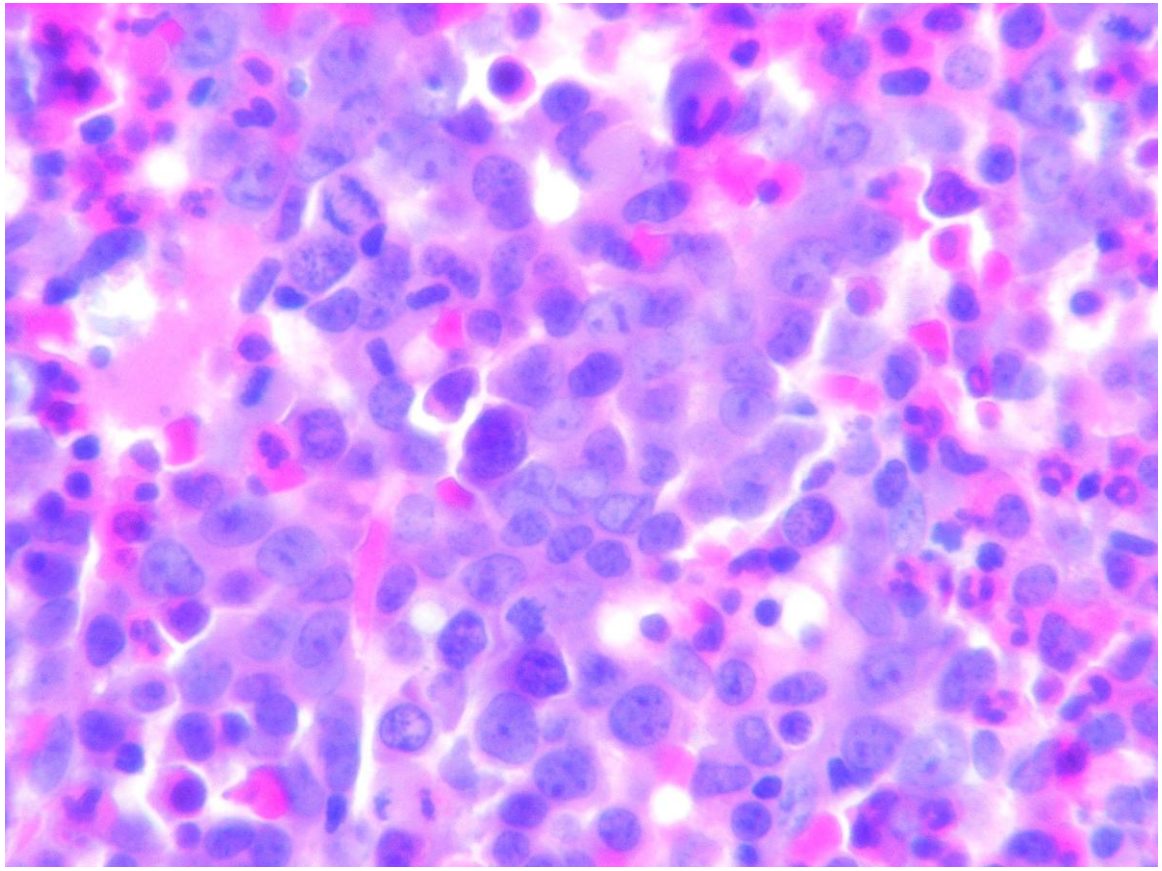
Bone Marrow Biopsy (cont'd)



Bone Marrow Biopsy (cont'd)



Bone Marrow Biopsy (cont'd)



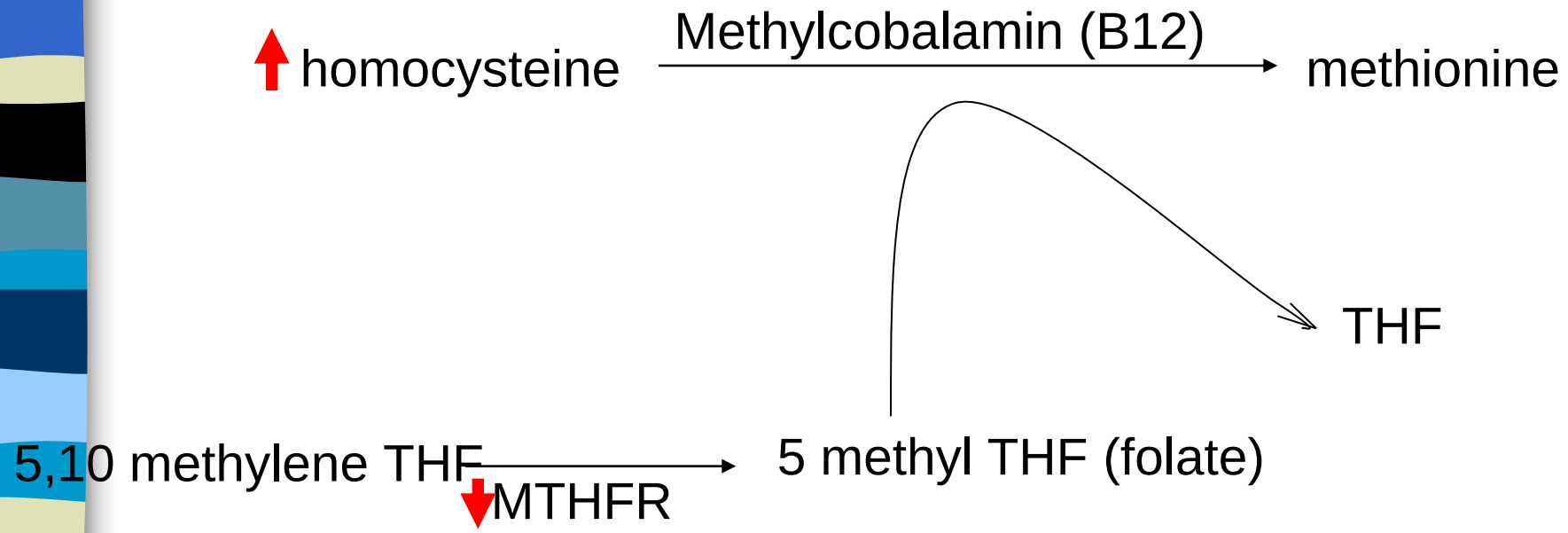
Diagnosis

- B12 = 52 pg/ml (ref 190-1,000)
  Folate = 11.7 mg/ml (ref > 3)
  RBC folate = 403 ng/ml (ref 199-867)
  LDH 3,747
  Haptoglobin < 6
  DAT: neg
  ANA: neg
  Iron studies: normal
  Homocysteine = 92.5 umol/l (ref < 13)
  Intrinsic factor Ab: pos (seen in 50% of pts with pernicious anemia)
  Parietal Ab: pos (seen in 90% of pts with pernicious anemia)
- DX: megaloblastic anemia secondary to B12 deficiency

Diagnosis (cont'd)

- Follow-up:
  GI scope
  Retic count
  Neuropathy ?
- Cytogenetics: normal chromosome

Homocysteinemia

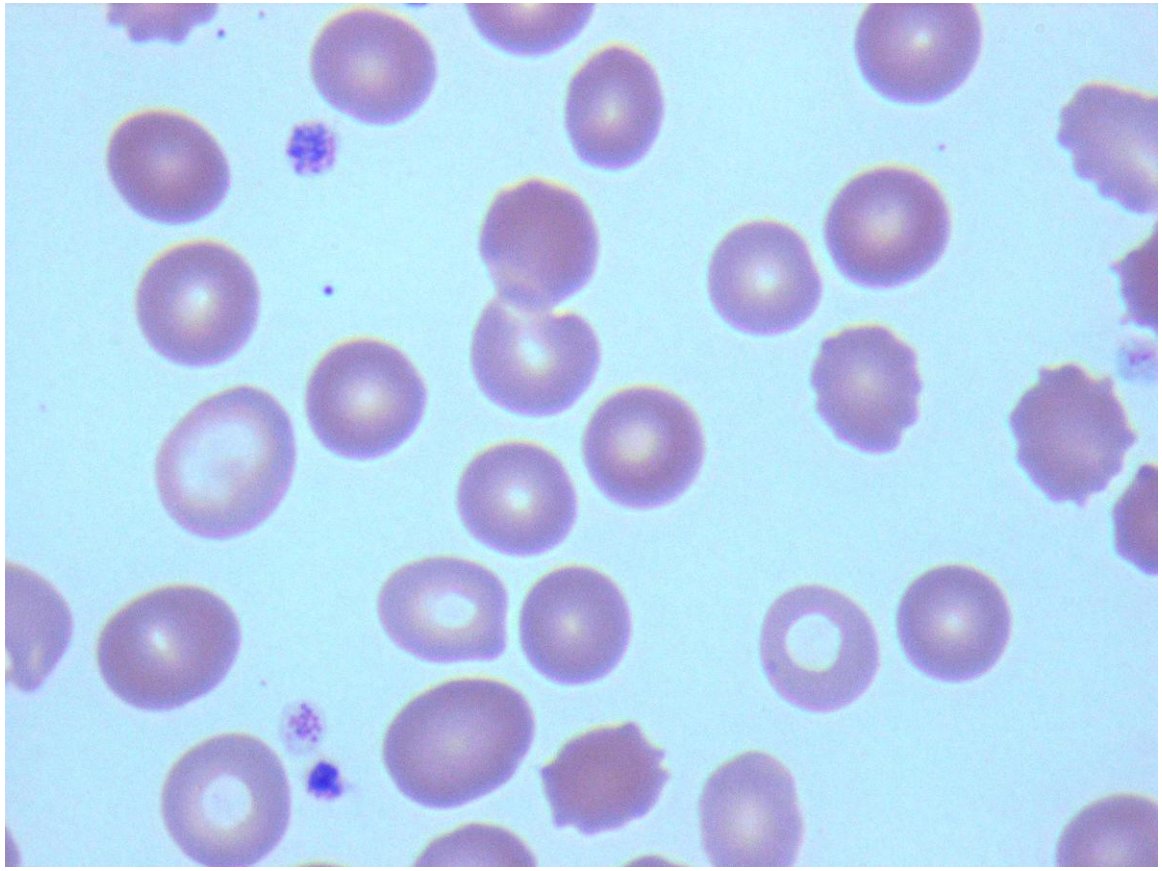


HB-03-42
Patient Name: Nxxx, Wxxx

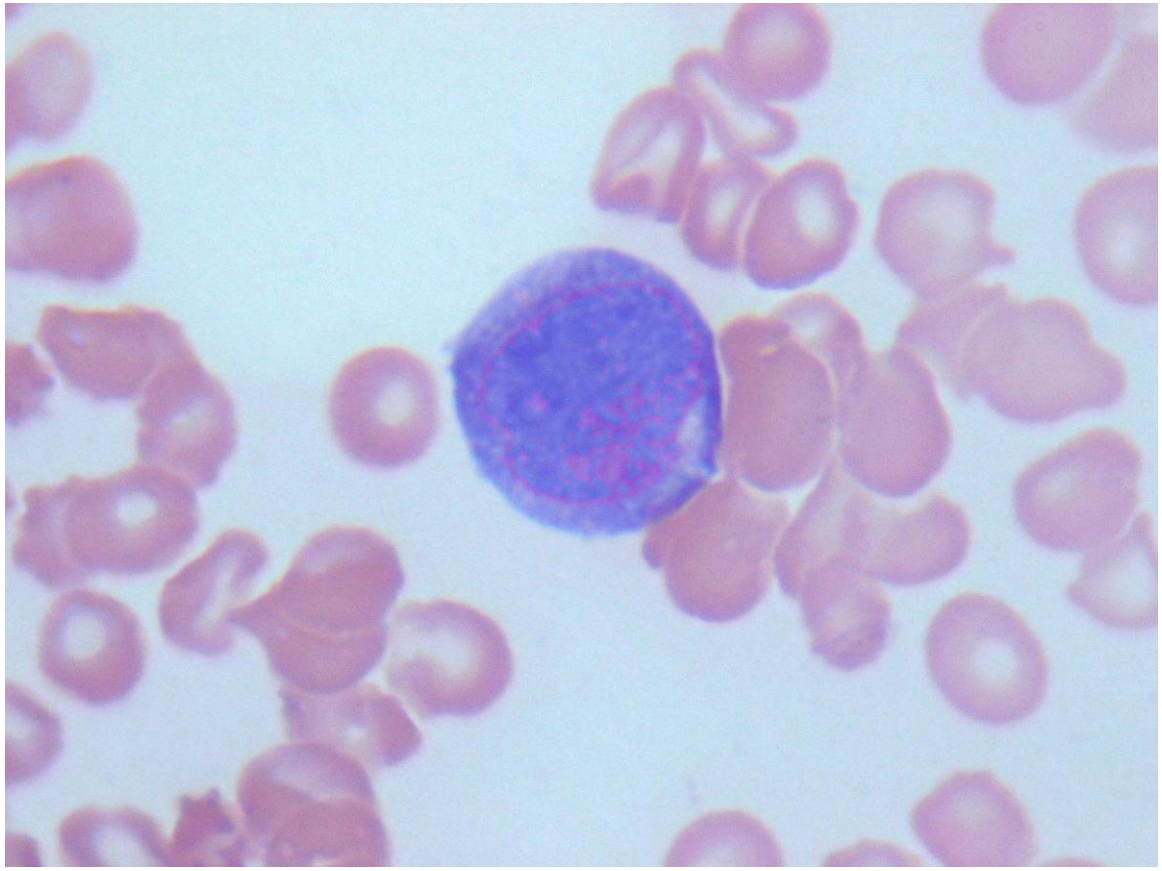
- 69 year-old male with hx of Alzheimer, SAH with VP shunt, currently with neuropenia.
- WBC= 0.7, Hgb= 9.6, Plt= 142, MCV=80.9
  Seg 0, Band 0, Lymph 83, Mono 17
- Bone marrow aspirate: Blast 7, Promyelo 5,
  Myelo 13, Meta 5, PMN&band 0, Eos & baso 0, Mono 2,
  Lymph 14, PC 1, RBC 53 (M/E 0.56)

- Bone marrow biopsy 30% cellularity

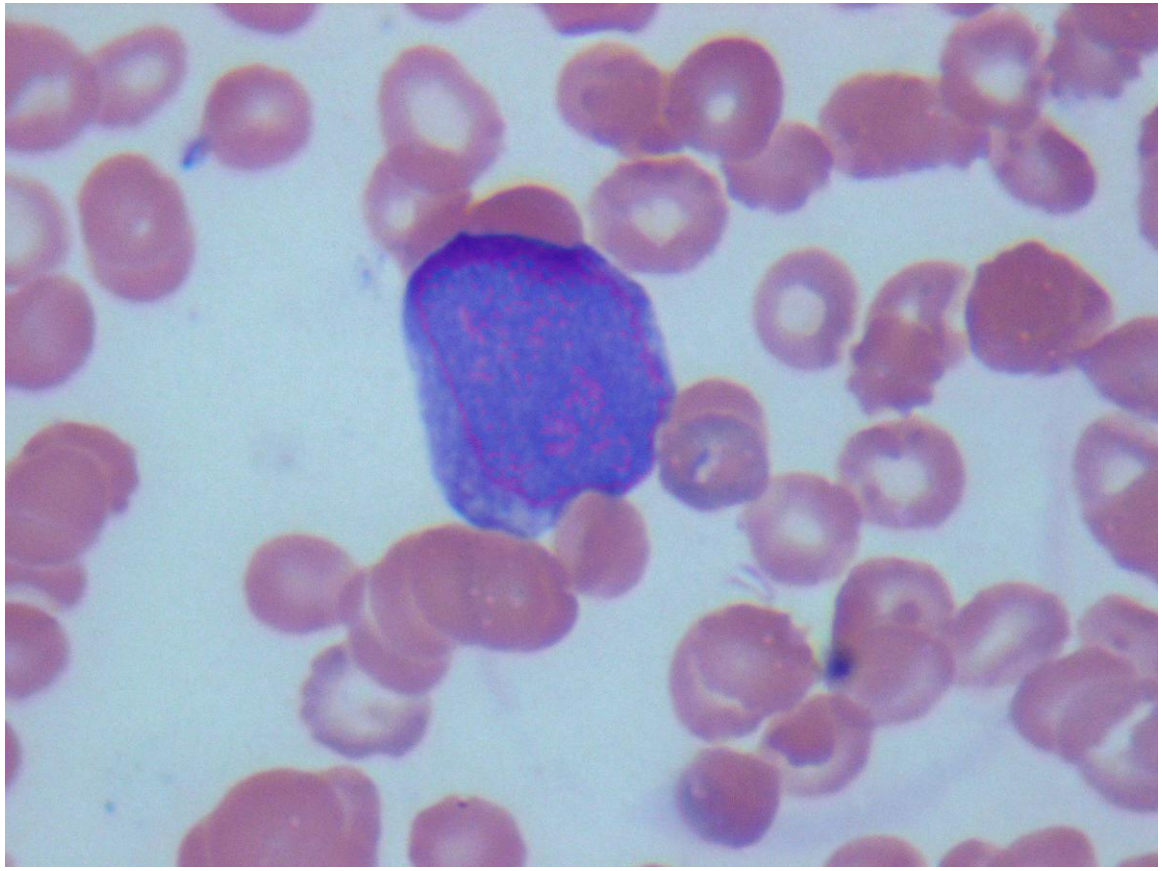
Peripheral Blood Smear



Aspirate Smear



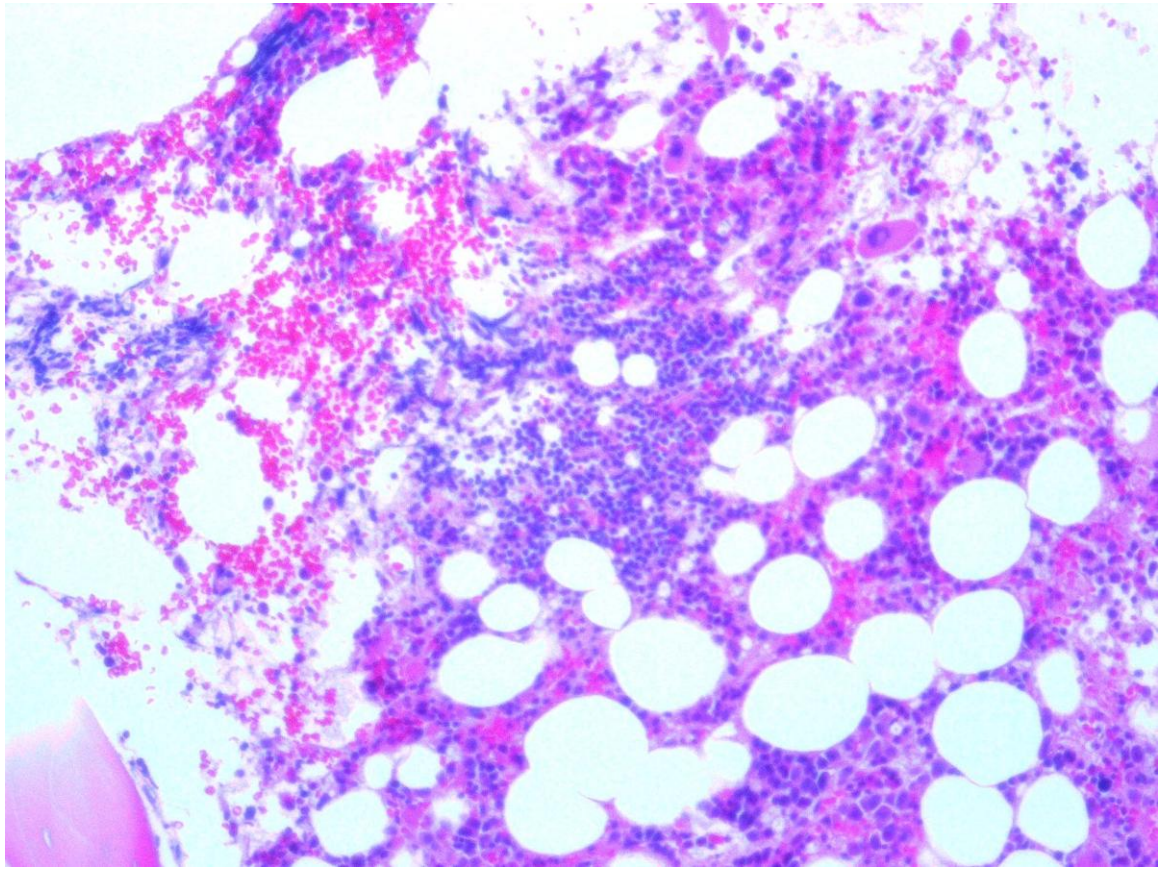
Aspirate Smear (cont'd)



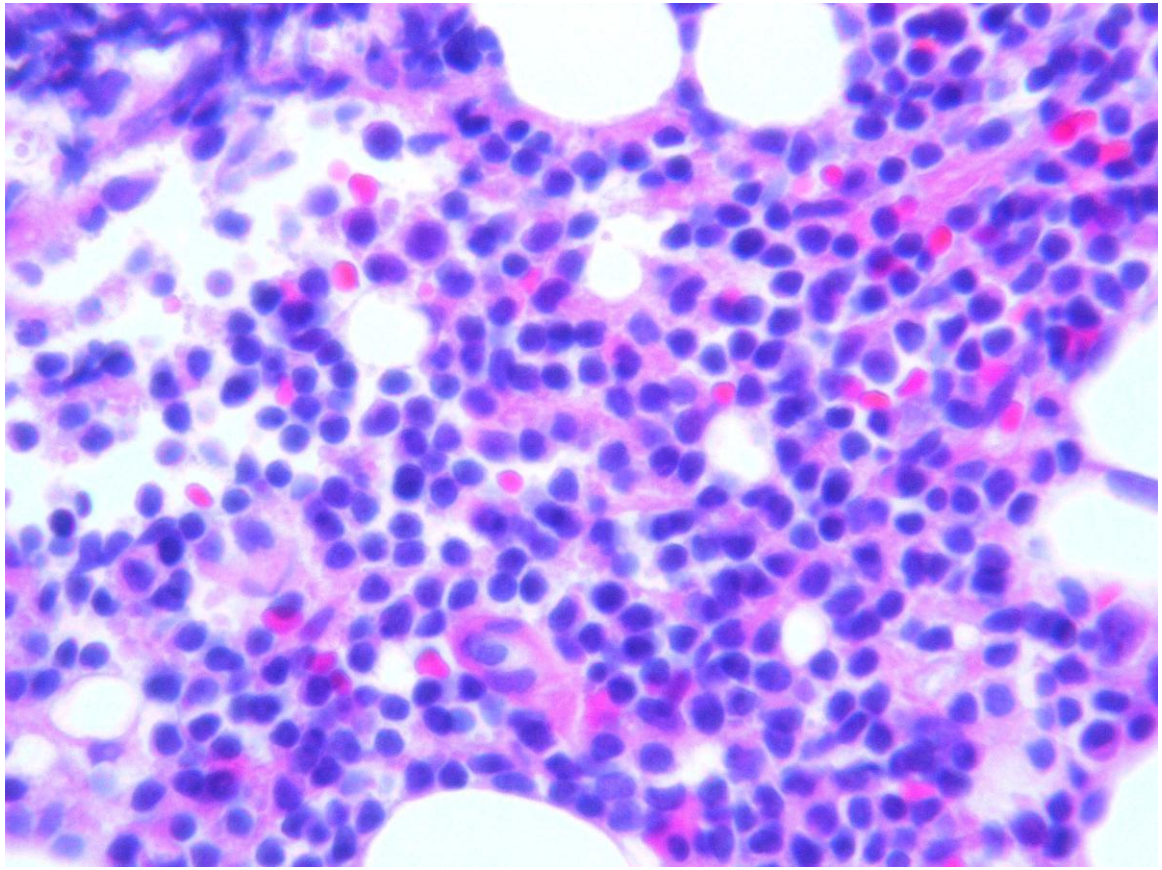
Aspirate Smear (cont'd)

Aspirate Smear (cont'd)

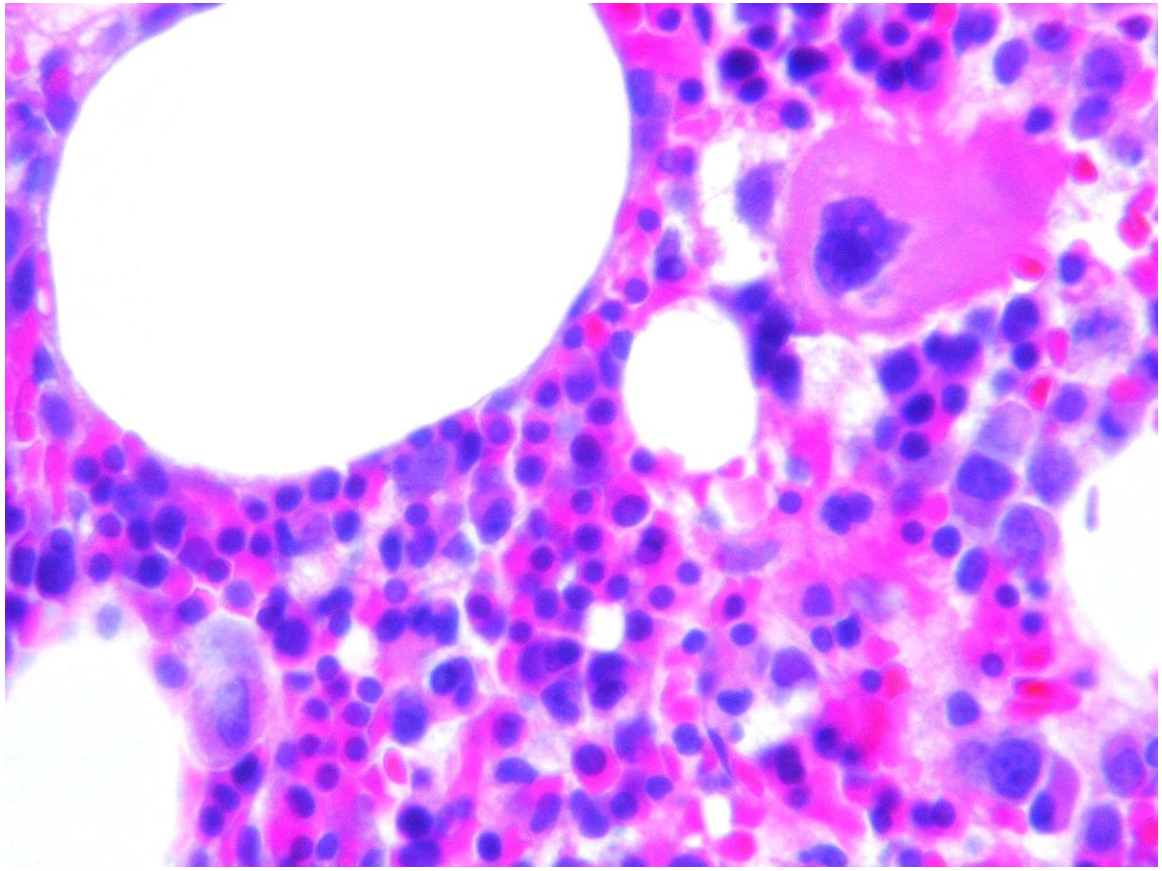
Biopsy



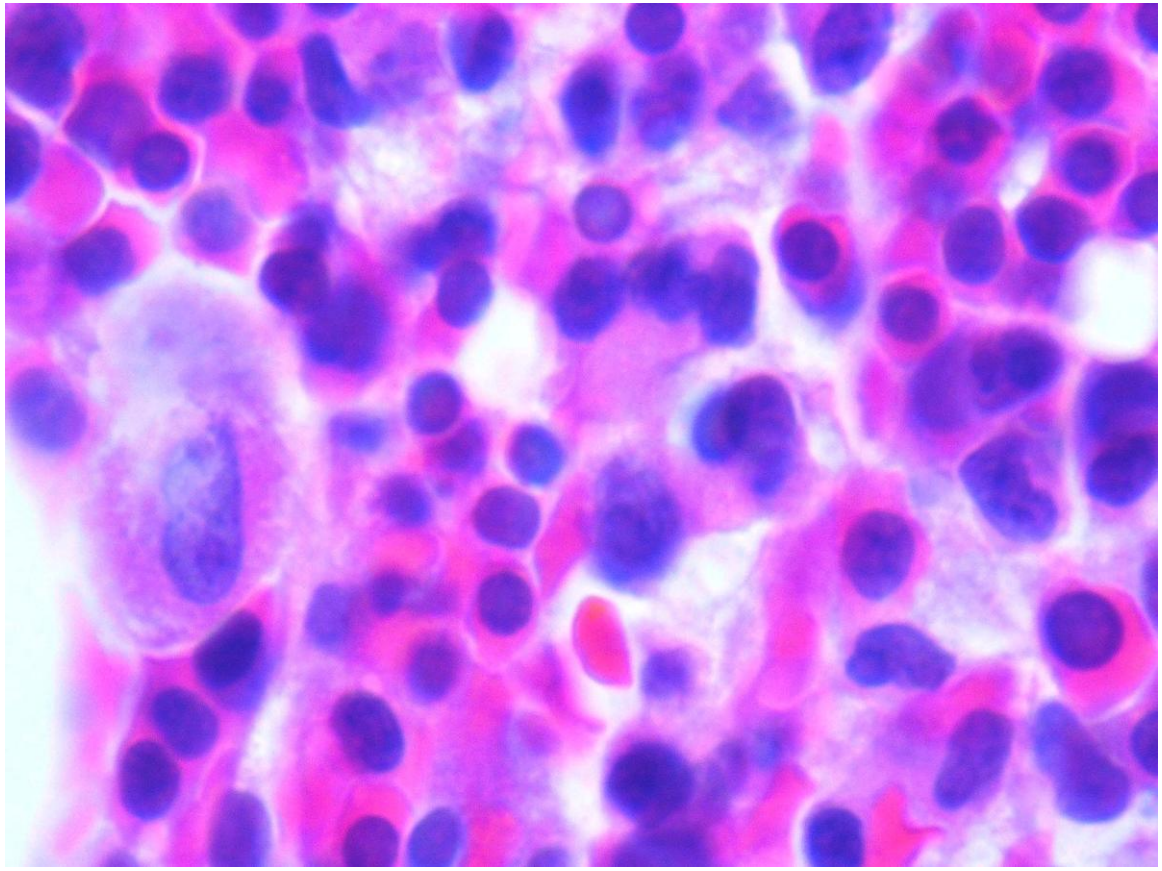
Biopsy (cont'd)



Biopsy (cont'd)



Biopsy (cont'd)



Diagnosis

- Neutropenia: due to Ritalin (?) [leukopenia and/or anemia]
- Nupogen treatment:
  - Increased blasts in bone marrow
  - Enlarged hoff of myeloid precursors
- Arrest of myeloid maturation (?)
- Patient's WBC recovered after bone marrow procedure

4/2/03	5.7
4/5/03	39.4
4/11/03	14.1
4/14/03	10.0