LASOP Slide Seminar
Case Presentation

November 10, 2009

Sara Acree, M.D. (PGY-3)
LAC+USC Medical Center
History

- **Pt:** 13 year-old Hispanic male
- **CC:** Fever, chills, night sweats, cough, and hemoptysis x 1 week
- **PMH:** None
- **PE:** Raised petechial lesions on chest
  - Generalized lymphadenopathy
- **CXR:** Diffuse bilateral pulmonary infiltrates
Lab Studies

• CBC
  – Hb 11.7 g/dL
  – Plts $91 \times 10^3$ μL
  – WBC $40.7 \times 10^3$ μL
    • NEUT 69, LYMPH 17, MONO 13, EOS 1

• Blood & Sputum Cultures:
  – Negative for aerobic, anaerobic, and acid fast bacteria
  – Negative for viral agents

• Viral serologies negative:
  – CMV, EBV, HSV, HBsAg, HBcAb, HCV, HAV, HIV
Flow Cytometry - PB

- CD45
- SS
- CD14
- CD13
Flow Cytometry - PB

CD16 vs CD11b

CD19 vs CD38
Flow Cytometry - PB

CD56RO

CD3

HLA-DR

CD7
Flow Cytometry (PB) - Results

**Positive:**
- CD45
- Subpopulation: CD7, CD11b, CD13, CD16, CD38, CD56, CD71, HLA-DR

**Negative:**
- CD2, CD3, cytoplasmic CD3, CD4, CD5, CD7, CD8, CD10, CD14, CD19, CD20, CD23, CD33, CD34, FMC7, kappa, lambda

**INTERPRETATION:** CD45 lymphoid process with partial myeloid antigen expression. CD7 on some cells may reflect a T-lineage associated phenotype.
Clinical Course, cont.

- **Day 2:** WBC doubled to $81.7 \times 10^9$ L
- **Day 5:** WBC doubled to $167 \times 10^9$ L
- **Day 7:** Worsening respiratory distress
  - Patient intubated
  - Transferred to children’s hospital
  - Started on ECMO
BM Aspirate