

Grand Rounds CPC  
February 24, 2009

Dear colleagues,

Below is a true case. We have included the pertinent details. On February 24, 2009, Dr. Frank Biro will analyze this case and present his differential diagnosis, potential unifying diagnosis and further workup. We are asking you to do the same. Take a little bit to read through the case. At the end of the case, you will have the opportunity to write down what you feel is the most likely unifying diagnosis along with a key test.

If you have prior knowledge of this case.....please keep that information to yourself. ☺

### THE CASE

16 yo girl

Cc: persistent fevers and pneumonia

On April 7, 2007, pt. presented to PMD with fever and right sided chest pain. She was dx with pneumonia on CXR (right middle lobe) and treated with full course of omnicef (10 days) and azithromycin (5 days). On April 20, she again presented to PMD with persistent fever, chest pain, vomiting and diarrhea. She was subsequently admitted to local hospital for 2 days for IVF and discharged home with moxifloxacin and prednisone. Her fevers resolved; her vomiting and diarrhea resolved but her chest pain only partially resolved. On May 2, she again returned to her PMD with a 103.0 temperature. She was readmitted to local hospital and placed on ceftin and gentamicin for persistent right sided pneumonia. She was discharged home after 5 days to complete 10 day course antibiotics. 2 days after this discharge, she returned to PMD with fevers to 101-102 along with bilateral arm and leg edema. She was noted to have oral thrush and was admitted to a local children's hospital where an initial workup was started.

ROS:

- Chest pain, fevers, edema, occasional headache with fever
- Usually no cough with pneumonia
- Recurrent episodes of mouth sores/blisters – none currently
- Recurrent fevers:
  - pt. with “almost daily fevers” to 100-102 since age of one; no recollected fever free intervals of > one week
  - If patient has temperatures to 103-104, family knows “she is sick”
  - 3-4 pneumonias annually (usually right sided clinically; occasionally dx with CXR)
  - 3 episodes of PE tube placement
- “Recurrent boils” on leg diagnosed last year via biopsy as vasculitis vs. atypical mycobacterium

PMH:

- Mild persistent asthma treated with beclomethasone, montelukast and prn albuterol
- GER – treated with omeprazole
- Menarche at age 11; cycle irregular

FH:

- Father deceased from Myocardial infarction at age 42
- DM, rheumatoid arthritis and HTN on both sides of family
- Maternal cousin with SLE
- Mother with recent hospitalization for soft tissue infection
- No family members with recurrent infections

SH:

- 10th grader; C-student; frequently misses days of school secondary to illness
- Active as a cheerleader; many friends
- Small town Kentucky; no farm; no animals
- Lives with mother and stepfather
- Heterosexual; denies any sexual activity or drug use
- Recent travel to Galveston, Texas for spring break

PE (on transfer)

- Vital signs stable (afebrile)
- Height <5<sup>th</sup> percentile
- Weight approximately 25<sup>th</sup> percentile
- Remainder of exam essentially normal aside from 2-3 pink, nonspecific plaques on legs and decreased aeration at bases of both lungs

Workup thus far:

- *Significantly normal labs include:* LFTs, renal, CBC, hepatitis panel, echocardiogram, sweat chloride, PFTs, immunoglobulins, CD3/CD4/CD8, tetanus/pertussis titers, multiple blood and urine cultures, Bartonella henselae, blastomyces, coccidioides, Histo Mycel H, Histo Mycel M, Aspergillus titers
- *Significantly abnormal labs include:* ESR – 54; CRP – 6.1; Chest CT with right sided bronchiectasis and ?mass in upper liver; abdominal CT with 6x6x8 cm mass in liver read as possible hemangioma

The patient continued to have intermittent fevers despite ongoing antibiotics. She was transferred to CCHMC for a further workup.

**Cincinnati Children's Hospital Medical Center**  
**Pediatric Grand Rounds: Clinicopathological Conference**  
Tuesday, February 24, 2009 / 8:00 AM / Sabin Auditorium

Name (please print): \_\_\_\_\_

Level (circle one):            Community Faculty            CCHMC Faculty

   R1        R2        R3        R4        R5

   Fellow        UC-III        UC-IV

   Other

Is there one unifying diagnosis for this patient?

---

One test revealed the diagnosis? What is that test?

---

Did you have any prior knowledge of the case?        Yes        No

**Please bring your completed form with you to the CPC conference**