



Haemophilus Meningitis and Septic Arthritis

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History

- 12 month old hispanic girl with 4 day history of fever, vomiting, diarrhea, lethargy
- Seen a day prior to admission in urgent care and diagnosed with viral gastroenteritis
- No sick contacts

Past Medical History

- Born full term, no complications
- No prior history of severe infections
- Immunizations up to date including:
 - 2 doses of heptavalent pneumococcal conjugate vaccine (PCV)
 - 3 doses of *Haemophilus influenzae* type b (Hib) vaccine
- No family hx of immune deficiency syndromes

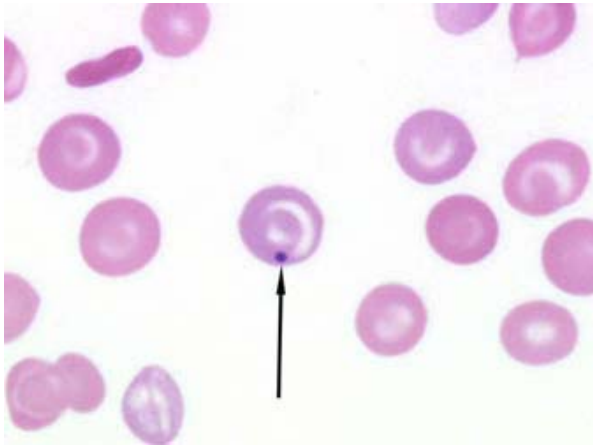
Physical Exam

- VS: T 36.2, HR 128, BP 100/54, RR 30
- Lethargic, dehydrated, no rash
- Terminal neck stiffness
- Hepatomegaly
- Spleen nonpalpable

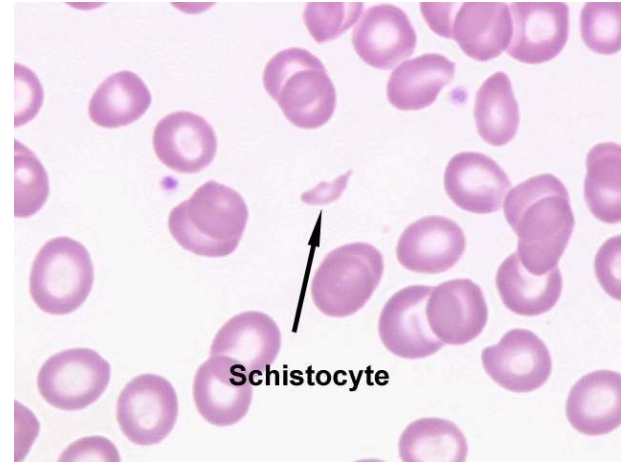
Blood Studies

- **WBC** 13,000 (Seg. 73%, L 19%), **Hgb** 8.3 (dropped to 4.3 after hydration), **Plts** 9,000
- **K** 1.9, **Glucose** 145, **BUN/Cr**, **D-dimers**, **Fibrinogen** all normal
- Smear:
 - Marked fragmentation of RBC
 - Schistocytes
 - Spherocytes
 - Burst cells
 - Howell-Jolly bodies
- Blood culture : *Haemophilus influenzae* type f

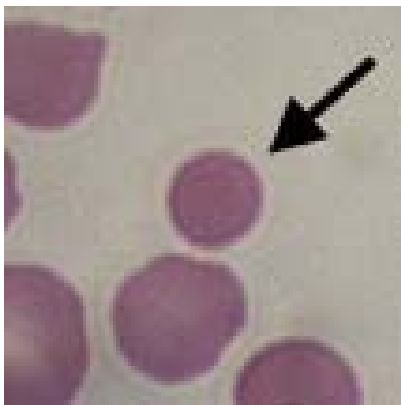
Blood Smear



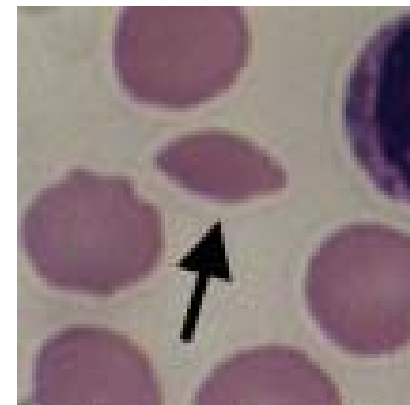
Howell-Jolly Body



Schistocyte



Spherocyte



RBC fragment

Other Studies

- CSF after 3 days on antibiotics when patient stable and thrombocytopenia resolved
 - **WBC** 775 (Seg. 40%)
 - **RBC** 17
 - **Glucose** 31
 - **Protein** 88
 - **Culture** no growth
- Abdominal ultrasound: No spleen
- **IgG** 790, **IgM** 103, **IgA** 112 (normal for age)

Hospital Course

- Treated with Vancomycin for 3 days and Ceftriaxone for >2 weeks
- Patient had persistent fever for 2 weeks
- Was diagnosed with septic L hip
- Hip I&D:
 - **WBC** 93,000
 - **Culture**: no growth

One Year Follow Up

- Neurological:
 - Significant hearing loss in L ear
 - Gross motor delay
 - R side hypertonicity
- Immune system/Infectious diseases:
 - No interim severe infections
 - On daily amoxicillin prophylaxis
 - Scheduled to receive:
 - Meningococcal vaccine
 - 23-valent pneumococcal vaccine

Summary

- Few H. flu type f reported cases in the literature
- None with both meningitis and septic arthritis in same patient
- Patient was more prone for H. flu infection because of the asplenia