Introduction:

Welcome to CUGH's bi-weekly clinical case-series, "Reasoning without Resources," by Prof. Gerald Paccione of the Albert Einstein College of Medicine. These teaching cases are based on Prof. Paccione's decades of teaching experience on the medical wards of Kisoro District Hospital in Uganda. They are designed for those practicing in low resource settings, Medicine and Family Medicine residents, and senior medical students interested in clinical global health. Each case is presented in two parts. First comes a case vignette (presenting symptoms, history, basic lab and physical exam findings) along with 6-10 discussion questions that direct clinical reasoning and/or highlight diagnostic issues. Two weeks later CUGH will post detailed instructors notes for the case along with a new case vignette. For a more detailed overview to this case-series and the teaching philosophy behind it, see Introduction to "Reasoning without Resources". Comments or question may be sent to Prof. Paccione at: gpaccion@montefiore.org

About the Author:

Dr. Gerald Paccione is a Professor of Clinical Medicine at the Albert Einstein College of Medicine in the Bronx, New York. His career has centered on medical education for the past 35 years – as a residency Program Director in Primary Care and Social Internal Medicine at Montefiore Hospital, and director of the Global Health Education Alliance at the school. He has served on the Boards of Directors of Doctors for Global Health, Doctors of the World USA, and the Global Health Education Consortium. Dr. Paccione spends about 3 months a year in Uganda working on the Medicine wards of Kisoro District Hospital where he draws examples for the case studies.

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CASE 2- FEVER II

A 20 year old man comes to the hospital in early October for "another episode of malaria", but this time it was unresponsive to quinine and Coartem.

He was well without a history of progressive weakness or weight loss, until 2 weeks ago when he began to notice low grade fevers with mild abdominal discomfort and a few bouts of loose stool, both of which resolved after 2 days. The fevers continued however, increasing day by day with evening peaks, and then became constant and high over the past week. He felt weaker, with cough and increasing headache, and has been constipated over the past 4 days with increasing diffuse abdominal discomfort. Anti-malarials provided no relief and his wife noted progressive listlessness and mental "dullness" in this usually talkative man. This morning he passed blood per rectum and his friends brought him to the hospital.

PE: Looks withdrawn, weak, sick but in no acute distress

BP 100/60 not orthostatic T 103.5 p.o. HR 112 RR 22

skin: normal without rashes, zoster scars or petechiae noted
conjunctiva: non-suffused, non-icteric
fundi: no papilledema or hemorrhages
mouth: no thrush, dentition normal, no petechiae
neck: supple, no lymphadenopathy, thyroid normal;
lungs: scattered basilar rhonchi; no sputum
cor.: PMI normal, 5th intercostal space, mid-clavicular line
S1, S2 normal; grade 1/6 systolic ejection murmur without radiation
abd.: mildly distended; tympanic, with diminished bowel sounds;
guarding and tenderness right and left lower quadrants to deep palpation,
not rigid, no tenderness to rebound or mild-moderate percussion;
spleen descends 3 cm below costal margin, soft;
liver descends 1 cm below costal margin, span 10 cm to percussion, non-tender
neuro: listless and seemingly apathetic,
oriented x 2 to name and place;
non-focal exam, motor and gross sensory exams normal
muscles non-tender

Questions:

1. **What is the "frame" in this case? (i.e. the key clinical features the final diagnosis must be consistent with)?**

2. **What is the most specific AND reliable feature of this patient's presentation, one that could serve as the "title" or theme of a focused "differential diagnosis"?**

3. **What is the significance of the findings on physical exam, both positive and negative?**

4. **What is the differential diagnosis and the most likely diagnosis in this patient?**

5. **What is the significance of the heart rate (HR) in this differential?**

6. **What laboratory findings might be expected in this disease?**

7. **In the 3rd and 4th week, what complications can be seen with this disease?**

8. **How would you empirically treat this patient? What are appropriate concerns with empiric therapy?**