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

Note: If you would like to be notified when a new case is posted (along with instructor notes for the previous one), send your e-mail to Jillian Morgan at jmorgan@CUGH.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.

Gerald Paccione, MD
Professor of Clinical Medicine
Albert Einstein College of Medicine
110 East 210 St., Bronx, NY 10467
Tel: 718-920-6738
Email: gpaccion@montefiore.org

CASE 18 – FEVER IV

A 37 year old man, a farmer who also tends cattle and sheep and was previously well, presents with headache, diffuse body aches, nausea with loss of appetite and persistent fever for 4-5 days.

The fever, headache and myalgias came on rapidly over the course of a few hours and have gotten worse. Although he took anti-malarials (?type) that he bought in a pharmacy, he now feels this is different because his groin is also sore. He has noticed no bites, but some skin lesions appeared on his legs a few days ago, and a rash on his trunk yesterday.

He is married with 4 children from his first wife and 1 from his second, has always lived in Kisoro, and was tested HIV-negative 2 years ago before his second marriage (his first wife died from puerperal sepsis).

Physical Exam: Well-nourished male in no distress.

BP 120/85 HR 98 T 102.5 p.o. RR 16

Skin: 3 painless, raised papules 1-2 cm diameter with central areas of necrosis on right leg;
diffuse, faint macular-papular rash, with ~ 10-20 1-2mm vesicular lesions, on trunk
Eyes: normal conjunctiva and fundi
Mouth: no thrush or petechiae
Neck: supple, no lymphadenopathy, thyroid normal
Lungs: clear
Heart: PMI in 5th ICS, MCL and normal; S1, S2, without murmurs or gallops
Abdomen: non-tender without guarding or hepatomegaly; spleen firm, 2 cm below costal margin
Groin: right side, tender 2-3 cm lymphadenopathy, soft-firm, not fixed/matted
Neuro: no focality, mental status intact

1. **What are the key features ("frame") in this case?**

2. **Name at least 5 diseases that can present with fever, headache, myalgia, and nausea/abdominal discomfort.**

3. **What clinical feature(s) differentiate(s) most of the patients with the diseases you named in #2 from the majority of patients with the disease described in the vignette?**
   What are most patients presenting with this patient's symptoms considered to have?
   What are the implications of timing and environment on diagnosis?
   How frequent is the "classic case" and what are the clinical implications of your answer vis-à-vis diagnosis and therapy?

4. **What is the relevance of race for detecting "rash" on exam?**
   Where should the examiner look for rash in African patients?

5. **What do eschars, fever, and rash suggest vis-à-vis types of organisms?**
   What clinical feature of eschars is important in the differential? Explain.

6. **What is the most likely diagnosis and why?**

7. **What other types of disease caused by this microbiologic species exist in Africa, what is common to them, and what is their range of illness-severity?**

8. **What is the recommended therapy in this case and all cases of disease caused by this microbiologic species?**