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 23 – COUGH PLUS

A 45 year old male, a farmer who lives with his wife and 4 of their 10 children, is referred by the Village Health Worker after a routine home visit.

He complains of increasing fatigue over the past month and 10 days of cough. He felt well until about a month ago when unusual fatigue began while digging in his field. Ten days ago (in Church on Sunday) he began to cough; the cough is mostly "dry", but recently has been intermittently productive of white-yellow sputum. Always thin, he's not sure if he lost any weight, "maybe a kilogram". He's had no shortness of breath or night sweats, and although he denies fever, he says he's felt "hot" on and off.

Over the past 6 months he's been increasingly bothered by a diffuse skin rash, particularly over his arms and legs but also on his chest and back, that itches a lot. In the past, he worked seasonally in Kampala, but not for the past 10 years.

P. E. Sitting in bed on the ward, in no distress

BP 105/75 HR 95 RR 20 T 100.5 axillary

Skin: firm, discrete .3-1cm, erythematous, urticarial papules

diffusely, with excoriation, arms/legs > chest/back; otherwise normal;

nails without fungal infection

HEENT: normal; mouth: no thrush

Eyes: sclera white; fundi, benign without papilledema, exudates;

Neck: thyroid normal, LAD: 1-2 cm diffuse, mobile, non-tender;

lungs clear, with occasional "squeak"/wheezing right base; no dullness

heart: S1, S2 split physiologically;

abdomen: no masses, no hepato-splenomegaly; non-tender

neurologic: mental status, cranial nerves, sensory/motor/cerebellum/gait normal

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

2. **What are the clinical implications of the following PE findings: temperature, skin lesions, lymphadenopathy, lung exam?**

3. **What are some history/physical exam clues to the presence of underlying chronic disease in Africa that the clinician should look for?**

4. **What are the "duration of illness" guidelines when evaluating "cough" in African hospitals?**
   How can the clinician use "severity of illness" as a diagnostic clue?

5. **Why is inquiry about "cough" commonly used for screening in many communities and ambulatory care settings in Africa?**
   How accurate are clinical features in diagnosing the cause of cough in these settings?

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

   Indicate the clinical "pros and cons" for each of your choices.

7. **What 2 tests would you order initially?**

8. **What are the implications of (possible) HIV on diagnosis and treatment of the presenting disease in our patient?**

9. **What should you do if the HIV test is positive but your diagnostic test-of-choice for the presenting illness is negative?**