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.

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CASE 10 – Back Pain II

59 year old man presents to the hospital because of pain in his lower back and buttocks for 4 months, becoming progressively more severe and now interfering with walking.

He was well until about 6 months ago when he began to feel weak and easily fatigued when digging, and began to lose weight. About 2 months later he noticed the gradual onset of pain in his right buttock when walking. Usually the pain was worse at night and in the morning after waking and more tolerable late in the day, but it never disappeared entirely and steadily progressed over the past few months. Two months ago he began using a wooden staff to support his weight, and month ago he could no longer bend down to dig, and stopped working. When the pain didn't improve at all with bed rest over the past few weeks and he began to need human support to walk, he decided to come to the hospital.

He has had diminished appetite and has lost weight. Although he denies cough or fever, he has felt "hot and cold" at times and sweats at night. He has never been HIV tested, has lived in Kisoro his whole life, and has been sexually active and monogamous with his wife with whom he has 5 grown children. He is poor, owns chickens but not livestock, and rarely drinks milk.

P.E. Cachectic elderly man, appearing older than age, walking slowly to the bed leaning on a wooden staff and supported by his wife. Sitting in no distress, coughing (though when asked, denies having a cough)

Physical Exam:

- Appears tired, depressed and cachectic, with an occasional cough during exam; in no acute distress. BP: 90/65 without orthostatic change; HR 105, to 110 standing; RR 22; T: 100.5 p.o.
- HEENT: conjunctiva: no pallor or icterus; mouth: no thrush;
- Neck: without lymphadenopathy, JVP, HJR, or thyromegaly;
- Lungs: normal percussion; clear to auscultation except right lower lung field: intermittent, scant crackles half way up;
- Heart: normal S1, S2; without murmurs, rubs, gallops
- Abdomen: liver percussed 2 cm below costal margin, 10 cm span; spleen tip palpable on inspiration; no masses, tenderness; Rectal: normal tone, hard stool, guaiac negative
- Extremities: no edema, clubbing
- Neurologic: mental status, cranial nerves, motor, sensory, cerebellar, gait normal; reflexes +2;

QUESTIONS

1. **What is the "frame" in this case (key clinical features from the history and exam that the final diagnosis must be consistent with)? What is the clinical significance of each of the items identified?**

2. **What is the clinical significance of the patient's night sweats and denial of fever and cough?**

3. **As with most diagnostic challenges in Medicine there are 2 "levels" of the differential diagnosis in this case: what and where is the *pathologic process*, and what is its specific *etiology*?**

    a. **<u>What</u> and <u>where</u> is the underlying <u>pathologic process</u>? How do you know?**

    b. **What is the most likely etiology and the differential diagnosis of this patient's problem?**

    c. **What are the pros and cons of each of the possibilities?**

4. **What tests and what therapy are appropriate for this patient?**