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 35 – Platypnea with Sudden SOB

A 24 year old man, a farmer living in the Kisoro district with his wife and 2 children, presents with 10 days of increasing chest pain and shortness of breath.

He was previously healthy, able to work the fields every day, until 10 days ago when in Church on Sunday he experienced the sudden onset of mild right-sided chest pain that increased with inspiration. The next few days he was able to work but the pain progressed, precipitated by ever more shallow inspiration and accompanied by a dry cough. He started to feel “hot” and at night could sleep more comfortably lying on his right side. Over the next 3-4 days he was short of breath when walking to his field, and he stopped working 3 days ago. He took panadol (acetaminophen) with some relief of the pain, and coartem for the “hot” feeling, without relief. When the chest pain and cough worsened and he began feeling dyspneic when walking short distances around his house, he came to the hospital.

There was no one in his family who was sick recently, and he’s never had this before. He’s experienced no weight loss, but has had decreased appetite since getting sick. He’s had no leg pain, or swelling in his legs or belly; feels less short of breath lying flat than sitting up; and doesn’t wake from sleep short of breath as long as he lies on his right side. He doesn’t drink, hasn’t lost consciousness, and produces no sputum.

Physical Exam:
Well-developed, in no acute distress but breathing rapidly, talking in full sentences sitting up
BP: 110/75; HR 95; RR 30, shallow; T: 100.2 axillary

Skin: normal, no rashes
Eyes: no conjunctival icterus or petechiae; EOM, PERRLA;
   Fundi: no hemorrhages, exudates; discs flat
Mouth: no thrush, no violaceous plaques;
Neck: shoddy lymphadenopathy, < 1cm; thyroid normal; no JVP/HJR
   Trachea: slight deviation to the left at the supra-ternal notch
Chest: no point tenderness elicited over the ribs or intercostals muscles on the right; pain
   elicited with diffuse pressure over the right lateral rib cage
Lungs: left lung: clear to percussion and auscultation
   right lung: dullness/flat to percussion half way up lung field;
      bronchial breath sounds posteriorly mid-lung;
      decreased breath sounds lower half, with absent vocal and tactile fremitus;
      E-to-A egophony heard faintly lower lung, and more prominently mid-lung
   No crackles;
Cardiac: PMI normal, not displaced; S1, S2 normal, no S3, S4; murmurs or rubs
Abdomen: no hepato-splenomegaly, masses, or tenderness
Extremities: normal, without clubbing or edema
Neurologic: normal mental status, cranial nerves, motor, sensory, cerebellar, reflexes
1. a) What is the “frame” of this case (i.e. the key clinical features the final diagnosis must be consistent with) from the history?  
   b) What is the clinical significance of each feature of the frame?

2. What is the clinical significance of the findings on Physical Exam?

3. a) What is the differential diagnosis and what’s for and against each possibility in the differential?  
   b) How would HIV disease influence the differential?

4. a) What’s the most likely diagnosis?  
   b) Why is it most likely?  
   c) What is its pathogenesis and natural history?  
   d) What’s the difference between its presentation in HIV (+) vs. HIV (-) patients?

5. a) What tests are indicated and how would they be of diagnostic utility in this case?  
   b) What tests popular in the West, would be of little use in this clinical context and why?

6. What treatment is indicated?