



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 40 – Common and Missed x 3

a) A 23 year old woman is admitted to the hospital with the chief complaint of 2 weeks of neck swelling. A farmer and mother of 2 children, she delivered her last child 3 months ago after a normal term pregnancy, and resumed working in the fields 2 months ago. She was in her usual state of fully functional health until two weeks ago when she noticed a painless swelling in the lower part of her neck associated with sweats and feeling “hot” all the time. She went to a clinic and received medications for malaria which didn’t help. The swelling has progressively increased and she now feels uncomfortable when swallowing. Her heart is “pumping fast” , she tires easily while working, and she hasn’t been sleeping well; she’s had loose bowel movements about 3-6 times a day for the past week days without nausea, vomiting or abdominal pain; and a headache, bitemporal and constant for 2 days. She’s noted no change in weight but an increased appetite, and was tested for HIV, negative, during her pregnancy. She’s had no skin changes, eye or visual problems, cough, shortness of breath, chest pain or joint pain.

Physical Exam:

In no distress, sitting up in bed; comfortable appearing

BP 90/40 lying, increased to 100/50 on standing; HR: 110 to 120 (lying to standing); T: 97 p.o.; RR 18;

Skin: normal texture, normal temperature in hands, hands moist, no rash;

Head normal; mouth: no thrush

ENT: no pharyngeal exudates or masses; normal TMs;

Eyes: no stare, no lid lag, no chemosis, proptosis, conjunctival icterus or petechiae;

Neck: supple; 8 (horizontal) x 6 (vertical) cm diameter thyroid, smooth without nodules; no bruit over thyroid;

2-3 cervical nodes bilaterally, 0.5-1.0 cm diameter, non-tender, mobile, non-fixed;

Lungs: clear

Heart: PMI in 5th ICS/mid-clavicular, 2 cm. hyperdynamic; S1, S2 normal, no S3, Gr 1/6 short SEM LSB without radiation

Abdomen: no hepato-splenomegaly, masses or tenderness

Neurologic: normal CN, motor, sensory, cerebellum; reflexes +3 diffusely; no tremor;

b) A 57 year old woman presents to the clinic complaining of 2-3 years of increasing weight loss and weakness despite a good appetite. Over the past few years she’s been tiring more easily while working in the fields, her arms and legs feel weak and her heart seems to “race” when she digs or climbs hills. She’s been more nervous, and for the past year has had bowel movements 3-5 times/day and recently at night, with watery diarrhea and crampy abdominal pain intermittently. She’s been de-wormed multiple times, and various antibiotics have had no effect. She’s had increased sweating but no fever, doesn’t have a temperature preference and was tested HIV negative last month. She’s had a swelling in her lower neck since adolescence, similar to other women in her family.

Physical Exam:

Thin, cachectic woman, fidgeting, looking uncomfortable sitting up, but in no acute distress

BP 130/82; HR: 118 and regular, lying down, 122 standing; RR 20; T 98.0 p.o.

Skin: warm hands, normal texture, dry, no rash;

Mouth: no thrush

Eyes: + lid lag; no chemosis, proptosis; no conjunctival icterus, pallor or petechiae;

Neck: supple; irregular nodular goiter prominent: 2 firm round nodules spanning 3-4 cm right lobe; 3 firm, round nodules 1-2 cm each, spanning 4 cm left lobe; non-fixed, non-tender, no transillumination; no bruit heard;

Lungs: clear

Heart: PMI in 5th ICS/mid-clavicular, 2 cm., normal; S1, S2 normal, no S3, Gr 1/6 short SEM LSB without radiation

Abdomen: no hepato-splenomegaly, masses or tenderness; increased bowel sounds

Neurologic: normal CN, sensory, cerebellum; motor: 5-/5 diffusely in arms and legs;
+ fine tremor of outstretched hands; reflexes +2 diffusely

c) A 28 year old woman presents to the hospital complaining of 4 months of “heart pains”. The pains started about 4 months ago, felt initially on climbing hills, and described (with her hand fluttering in the air) as her heart pounding very fast on mild exertion. The problem has progressed: now she’s experiencing the “pain” for hours even at rest - a rapid fluttering and vague discomfort in her chest. In addition, she always feels “hot”, even in the rainy season, is more comfortable at night than during the day, and always feels hungry - eating more than usual and gaining weight. She’s noted no change in her bowel or sleep habits, or mood. She’s had no joint pains, fevers, changes in her vision or eyes, but complains of her hair falling out. Upon direct questioning, she notes that there’s been an increased fullness in her lower neck region but is unsure of its duration. She continues to work in the fields, but feels “sick” when she does. She has 3 children, the last one delivered without problems 2 years ago.

Physical exam:

No distress, sitting on edge of bed, seeming jittery and shifting position frequently, clumsy disrobing for exam

BP 140/70; HR 110 at rest, 140 after walking 40 yards, regular; RR 16; T 97 p.o.

Skin: smooth; palms moist and warm;

Eyes: no lid lag, chemosis, proptosis; no conjunctival icterus, pallor or petechiae;

Neck: smooth, diffuse goiter without nodules, firm, non-tender, 3 cm (vertical) lobes bilaterally;
+ bruit over thyroid, systolic, no change with neck rotation or compression over internal jugular veins;

Lungs: clear

Heart: PMI in 5th ICS/mid-clavicular, 2 cm. hyperdynamic; S1, S2 normal, no S3, Gr 1/6 short SEM LSB without radiation

Abdomen: no hepato-splenomegaly, masses or tenderness; normal bowel sounds

Neurologic: normal CN, motor, sensory, cerebellum; + fine tremor accentuated by paper draped over outstretched hands; reflexes brisk, +2-3 diffusely

1. What symptoms are common to all 3 of these patient presentations? To at least 2 of the 3 presentations?

2. What physical exam signs are common to all 3 of these patient presentations? To at least 2 of the 3 presentations?

3. What physiologic aberration explains all three illnesses? Explain.

4. Which symptoms and signs are the most valuable/accurate in diagnosing this condition? (What are the sensitivity and specificity and/or likelihood ratios for the various clinical manifestations of this disease?)

5. How does the *usual* presentation of this condition vary with patient age?
What are the *common pitfalls* of clinical diagnosis to be aware of in this condition?

6. a) What other symptoms and signs, not mentioned above, might suggest the diagnosis?
b) How should an isolated symptom or sign, consistent with the diagnosis, be evaluated?

7. What does the history and physical exam tell you about the possible specific pathology underlying the physiology in each of the 3 patients?

7. What is the pathogenesis and the significance of Uganda in these diseases?

8. What is the natural history of these disorders, and how should they be treated?