



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 28 – CHRONIC DIARRHEA x 2 Vignettes

Please read the following brief vignettes and answer the questions that follow:

A) A 65 year old woman presents with abdominal pain and bloody stools for 3 years. She was well, working as a farmer, until about 3 years ago when she began to have crampy, intermittent pain in the left lower abdomen relieved by defecation. Shortly thereafter, she noticed blood in her stools - which were watery, mixed with blood, appearing “red and white”. The pain and blood persisted, waxing and waning in intensity over the next 2 years, sometimes seeming to respond to treatment with antibiotics she received at the health center. During the past 6 months the left-sided pain has gotten worse, becoming constant, and associated with diarrhea more than 12 times a day. She constantly feels the urge to defecate, but passes little. She’s lost weight, has felt “hot” for years on and off, and has had a cough for the past month which hasn’t been bothersome.

Physical Exam:

Elderly, talkative, thin woman, pointing to her lower abdomen, in no distress

BP 97/56 without orthostasis; HR 88 (92 on standing), RR 14, T: 97.2 p.o.

Eyes: conjunctiva: mild pallor; fundi: benign;

ENT: normal Neck: no lymphadenopathy or goiter; no JVP/HJR

Lungs: clear to auscultation and percussion

Cardiac: PMI normal, 5th ICS, MCL; S1, S2 normal without murmurs, rubs, gallups

Abdomen: non-distended, normal bowel sounds; no hepato-splenomegaly;

Left-lower quadrant soft lumps and loops of ?matted bowel, mobile, non-tender with underlying discrete round lumps firm but not hard, non-tender, non-fixed, felt on deep palpation; no tenderness elicited

Rectal: no masses, stool guaiac +

Extremities: normal without edema

1. What is the frame of this case (the key clinical features the final diagnosis must be consistent with)?

What does the frame suggest about the location and pathology of the underlying disease?

2. What is the differential diagnosis and the most likely diagnosis?

3. What are the most feasible diagnostic tests?

What is the “gold standard” of diagnosis and its limitations?

4. What is the frequency of various symptoms and the complications of this disease?

B. A 5 year old child is brought to clinic by his mother for persistent diarrhea for 3 weeks. He is one of 5 living children (2nd youngest, 3 other siblings died in infancy) but was never healthy as long as his mother remembers. He was weaned at 4 months when his mother couldn't produce enough milk for him and his older sister. During the first couple of years of life he had a bout of watery diarrhea every month or two, similar to but worse than his siblings, and episodes of cough and fast breathing for which he was hospitalized 3 times. He grew slowly and is shorter than most of the kids his age.

Within the past year or two, his stools have been loose, usually about twice a day, with flares of watery diarrhea that persist for 2-3 weeks and occur every 2-3 months. This recent episode of diarrhea began 3 weeks ago with an abrupt worsening - from “loose” stool to frankly watery diarrhea 6-10 times a day without blood, accompanied by a low grade fever. He received ORS from the Village Health Worker and after 3 days his diarrhea improved, but 3 weeks later he still has diarrhea 3-4 times a day. His mother brought him to the clinic because he's lately been refusing to eat. His mother hasn't noted fast breathing, blood in the stool or fevers. She and her husband are poor but without known health problems. Both have been tested HIV-negative, as has the child who has received all his vaccinations.

Physical Exam reveals a restless child, short in stature and mildly cachectic; hair slightly lighter than normal and thin; normal respirations and depth, temperature axillary 97.5, HR 96; eyes and mouth moist, tongue smooth, conjunctiva mildly pale, eyes sunken, skin turgor on flank and chest normal, capillary refill time over palmer surface of distal finger 1-2 seconds; lungs clear; heart normal, no organomegaly or edema.

1. “Syndrome” definitions focus pertinent differential diagnoses and probabilities of disease.

What syndrome applies to this child, and how is it defined?

How serious a global health problem does it represent?

2. What are the primary objectives of the physical exam when assessing this problem, and which particular signs are most relevant and/or useful?

3. What is the “frame” of this patient's presentation (i.e. key clinical features the final diagnosis must be consistent with), and the clinical relevance of each feature?

4. What is the differential diagnosis of this problem in children in rural Africa?

5. What laboratory tests could be useful in assessing the problem and what are the limitations of “gold standard” tests in this situation?

6. In this patient, what is the likely diagnosis and the approach to treatment?