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

Important note: We are developing an email distribution list of persons interested in the cases. This list will ensure that interested faculty receive timely notice of the next case and the instructor notes for the previous case, while reducing the frequency of announcements to CUGH and GHEC's full distribution lists. Please notify Jillian Morgan at jmorgan@CUGH.org if you'd like to be on the list.

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 5 – LEG EDEMA

This case was prepared by Phuoc V. Le, MD, MPH, Jonathan Crocker, MD – Partners in Health and Harvard Medical School based on work done in Malawi

26-year-old woman presents to a clinic in rural Malawi with chief complaint of bilateral lower extremity edema. She noted persistent bipedal swelling one year ago when pregnant with her fourth child, and is now worried about a few "ugly bumps" which appeared several months ago on both feet. She complains of tightness and mild pain in her legs and thighs, especially with long walks. The swelling does not improve when recumbent. There is no history of leg ulcers. She has had no fever, night sweats, shortness of breath, dyspnea on exertion, orthopnea, cough, jaundice, abdominal pain, dysuria, hematuria, nausea, vomiting, weight loss, melena or hematochezia. Her urine has been clear, and she also denies any prolonged febrile illnesses before and since her edema started.

Her prior pregnancies were not associated with edema, and her last pregnancy and delivery were normal. Of note, aside from a child who died recently after developing edema all over his body, she does not recall anyone in her village having similar swelling in their legs. She lives in a relatively flat region, with no hills and no rivers/lakes. Her HIV status is unknown. There is no personal history of TB, and no known TB contacts. She has never smoked and does not drink alcohol. Her husband died 4 months ago from a diarrheal illness, but had been chronically ill with weight loss and weakness for some time before that.

Physical Exam:

T: 37.3 C HR: 72, BP 110/65, RR: 14, Wt: 47.5 kg, Ht: 1.55m
General: No acute distress, thin appearing, but not wasted
HEENT: Pupils equally reactive to light, extraocular movements intact, conjunctiva slighty pale. No icterus, cervical lymphadenopathy, thrush or oral lesions.
CHEST: Lungs clear bilaterally. Heart sounds regular without murmurs, rubs or gallops. Normal PMI. No JVP visible above sternum at 20 degrees elevation.
ABDOMEN: Soft, without tenderness, distention, or shifting dullness. Liver is 2 cm below costal margin, spleen tip barely palpable, no CVA tenderness
NEURO: No focal abnormalities are found
EXTREMITIES: Normal upper extremities. Lower extremities grossly edematous, non-pitting, non-tender, firm/woody to touch in both feet and up to mid-shin bilaterally. +Bilateral inguinal lymphadenopathy, with ~10cm area of firm, hyperpigmented, edematous skin in groin
SKIN: ~0.5 to 1cm verrucous growths on both feet (totaling 8 lesions), non-umbilicated, non-ulcerated, non-tender. On upper right upper thigh ~15 hyperpigmented, firm, nodular lesions ~1-1.5cm in diameter noted, nontender, non-pruritic. (See pictures)

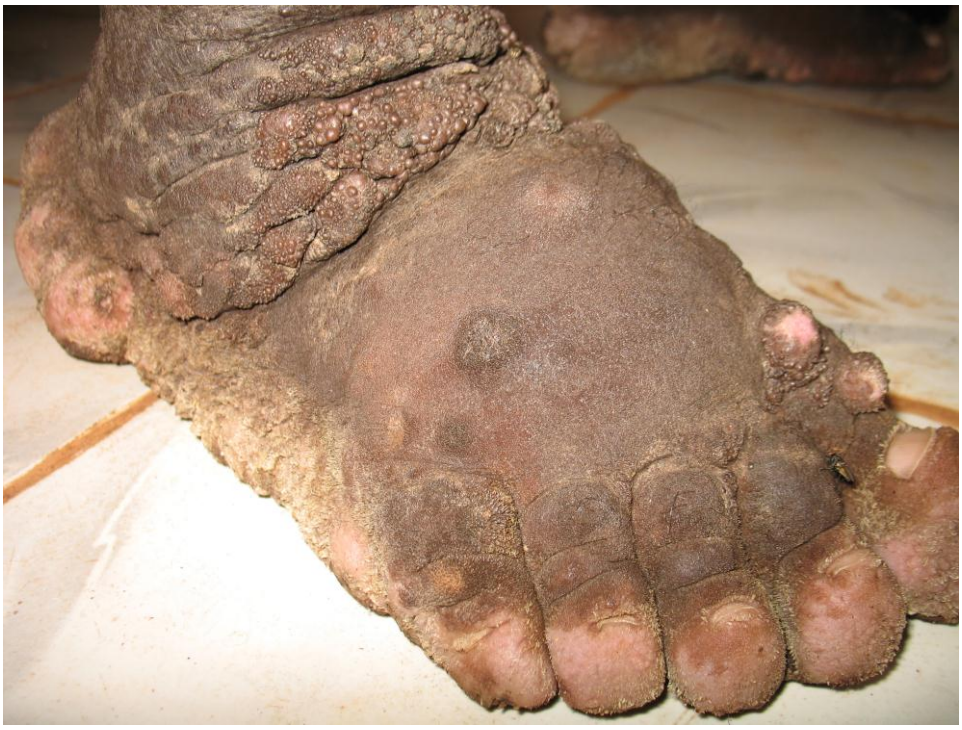

Figure 1. Right foot.

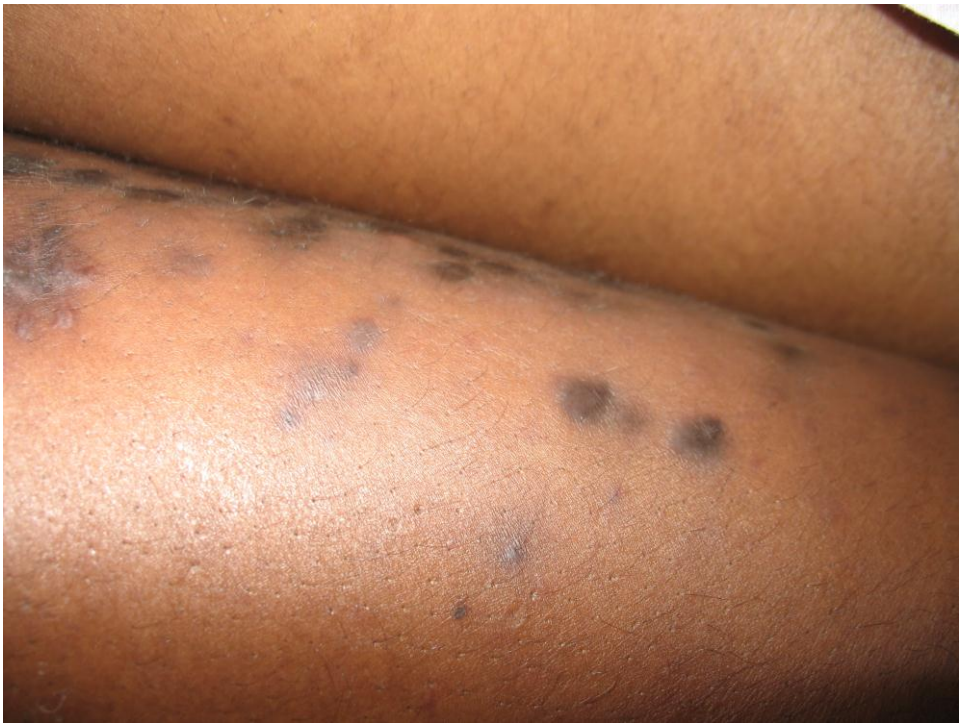

Figure 2. Right thigh.

QUESTIONS

1. What is the "frame" of this case (i.e. the key clinical features the final diagnosis has to be consistent with or explain)?

2. What is your differential diagnosis? What elements of the history and physical support or reject your diagnoses?

3. What testing is indicated at this point?

4. How do these tests narrow your differential diagnosis?

5. What should be your initial management approach be for this patient? Are there other tests that can be useful?

6. Any other steps you would take at this point?

7. What are the long-term treatment options for this patient's condition?

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