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 Katherine Unger at kunger@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 49 – Embarrassing and Persistent

32 year old man a farmer in Kisoro married with 4 children presents to the hospital with worsened symptoms of testicular enlargement and pain unresponsive to therapy for weeks.

He had been well, without past known sexually transmitted diseases or urinary infections, until 5-6 weeks ago when he noticed that his left testis was getting larger associated with a heavy dragging sensation in his scrotum. The enlargement and discomfort progressed over the next 2 weeks and he came to the hospital. At that time he claimed to have been monogamous (including during a 2 month trip to Kampala to work as a farm laborer 6 months before), and denied urethral discharge or a history of penile ulcers. The hospital notes recorded his temperature as normal, his left testis as firm, oval, 4x5 cm in size, and mildly tender. No further exam was recorded. He was treated with IM ceftriaxone and given doxycycline to take for 2 weeks, and after 3 days of in-hospital treatment he returned home not feeling any different but reassured that he would soon improve.

However, over the next 2 weeks after leaving the hospital, he didn't feel any better and now he returns. His scrotum seems larger and more painful, and he is concerned about cancer. He has taken his medications religiously, has not noted a urethral discharge, fevers, sweats or weight loss, nor any symptoms of hematuria, dysuria, diarrhea, headache or cough. He works as a digger, owns some chickens but no cattle, goats or sheep, and does not drink milk. He has not been HIV tested. He knows no other men with this type of problem in his village.

Physical Exam: Adult male looking stated age, thin not cachectic, in no distress but anxious.
B.P. 110/70, H.R 95, R 14, T 98.8 axillary
Skin: normal except over scrotum; no areas of hypopigmentation
Eyes: normal conjunctiva; fundi benign without exudates
Mouth: no thrush
Neck: no lymphadenopathy or thyromegaly
Lungs: clear
Heart: normal PMI; normal S1, S2,
Abdomen: no hepatomegaly; spleen tip palpable 1-2 cm below cm. non-tender, firm; no masses;
Genito-urinary: no flank/CVA tenderness or masses felt
penis normal, uncircumsized;
scrotum: swollen, with slight peau d'orange of left side
right epididymis/testis: normal, 2.5 x 3.5 cm, soft, vas deferens normal
left: testis large, oval and firm, mildly tender, 4.5x6 cm; non-transilluminating
epididymis thickened, firm-nodular
vas deferens: indurated, beaded, non-tender
prostate: firm, slightly enlarged with 1 cm. non-tender nodule felt
Lymph nodes: left groin: pair of inguinal nodes, 2x2.5, 1.5 x 2cm, non-tender, firm, mobile
Extremities: no swelling or deformities, normal
Neurologic: normal, no focality, no loss of sensation

U/A: s.g. 1.020, +1 protein, + 3 leuk.esterase, +2 blood, (-) nitrites; 20 WBC, 30 RBC; no casts

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

2. **What is the *differential diagnosis* in this patient, and the pros/cons for each of the possibilities? What is the *most likely* diagnosis?**
   Which diagnoses for this problem must be considered far more frequently in *Africa* than in the West?

3. **What is the most frequent mis-diagnosis of patients with this disease in district hospitals in Africa, and why?**

   What test is indicated, and what is the appropriate therapy in this case?