



## **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 instructor 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](mailto: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](mailto: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 41 – Pumping Fast

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A 22 year old male, a farmer married with 1 child, was previously in good health until 6 months ago when he began to experience episodes of sharp right-substernal chest pain associated with “heart pumping very fast” that occurred especially when walking fast or working hard. The heart pumping would start suddenly, last approximately 1-15 minutes, and stop suddenly. It occurred about once every week 6 months ago, but now occurs every 2-3 days, more with exertion, but even while sitting and lying down.

Two weeks ago he began to feel increasingly fatigued and short of breath while working. Four nights ago he awoke from sleep with dyspnea, right substernal chest pain and the “heart pumping” which lasted longer than usual. He didn’t work over the past 3 days. He’s had no fevers, cough or sputum. He usually sleeps flat, and hasn’t woken short of breath until the episode 4 nights ago.

### Physical Exam:

Looks well, thin, in no distress sitting upright

BP 100/60      R 15,      HR 80, regular;      T 37

HEENT: conjunctiva normal without icterus, pallor; fundi benign; mouth no thrush;

neck: no JVP at 45 degrees, ⊕ HJR; no nodes; thyroid normal; carotid +2, sharp upstroke

lungs: clear

cor. PMI: non-sustained, vigorous LV heave, 2 cm lateral to the MCL, 4 cm diameter;

RV lift, asynchronous with LV heave, “rocking motion” of chest wall;

S<sub>1</sub> normal intensity; P<sub>2</sub> ↑’d left upper sternal border;

⊕ S<sub>3</sub> apex, ↑’d with expiration

4/6 holosystolic murmur apex → axilla, medium pitch

2/4 diastolic decrescendo high-pitched murmur LSB spanning diastole,

↑’d with hand-grip (held for 1 minute)

2/4 diastolic rumble apex without OS or pre-systolic crescendo; ↑’d with expiration

abdomen: normal, without hepato-splenomegaly or tenderness

extremities: no edema; pulses +2-3 throughout

Neurologic: mental status, CN, motor, sensory, cerebellum, gait intact

