

## **TBL Case 1**

### **Meet the patient**

Patient is a 45 yo female who presents with a “run down feeling” after returning from a trip to India. When talking with the patient you learn that she just hasn’t been able to perform the activities she normally could without having to rest. For example, a few weeks ago, she was able to do her regular job plus work around the house, totaling approximately 12 hours per day. Recently, however, she is exhausted after a few hours of activity. The patient is not aware of the “exact” moment that the symptoms started, but noted it has not changed in intensity over the past two weeks. Activity worsens the feeling; rest improves her symptoms. The patient also complains of chest pain with deep breathing. The only other change the patient has noticed is that her left lower leg seems larger than her right.

Review of symptoms: Pt denies any fever, change in weight, rash or jaundice, dizziness, cough, shortness of breath, wheezing, palpitations, new edema, abdominal pain, nausea/vomiting, gastrointestinal bleeding (bright red blood per rectum, or black and tarry stools—melena—what’s this do to?), episodes of seizures or syncope, any signs of depression.

Past Medical History: Pt had breast cancer treated by lumpectomy in 2002. Her estrogen receptors were positive and she is currently on Tamoxifen. Pt has never smoked and denies alcohol. She is a married business woman who returned from India 2 ½ weeks ago. Pt has gone through menopause. Meds currently include Tamoxifen and alendronate. No allergies. She travels a lot with work.

Physical exam: Temp 98.6 HR 120 Respirations 22 Oxygen Saturation of 86% on RA

Aside from the tachycardia, the cardiovascular exam was normal, as was the pulmonary and abdominal exam. The left calf measured 5cm greater in circumference than the right.

Rest of the physical exam was normal.

### **What physiological problems could account for these symptoms of fatigue?**

Organize your thinking by systems and make yourself consider each of the following. List the abnormal physiology, not specific diseases.

1. Psychiatric
2. Cellular (don’t forget the organelles)
3. Pulmonary

4. Cardiovascular
5. Hematological/Immune
6. Renal
7. GI
8. Endocrine
9. Infectious
10. Combination of systems

**What physiologic principle or property could be measured with a lab or imaging study that could help you?**

**Suggested diagnosis or abnormal physiology**