

**Case 7 (February 28 2008):** [N Engl J Med. 358\(9\):941-952](#)

**Demographic:** Female, 17yrs, Not-pregnant, America North, General speciality

***Clinical features extracted from the case and entered into the query box:***

chest pain  
hemoptysis  
cough  
fever  
tachycardia  
hypoalbuminemia  
tachypnea  
lower limb edema  
proteinuria  
hematuria  
hyperlipidemia  
low oxygen saturation  
elevated jugular venous pressure  
right ventricular heave  
elevated levels of brain natriuretic peptide  
right ventricular dilatation  
pulmonary hypertension  
elevated troponin  
elevated lipoprotein a

***Synonyms used by Isabel for the above query:***

Chest pain  
Hemoptysis  
Cough  
Fever  
Tachycardia  
Lower limb edema  
Hypoalbuminemia  
Tachypnea  
Proteinuria  
Hematuria  
Hyperlipidemia  
Low oxygen saturation  
Pulmonary hypertension  
Elevated troponin

## **STOP !**

**Before you read further you might want to construct your own:**

- Complete differential diagnosis
- Final diagnosis

**In the following section you will find:**

- The differential diagnosis constructed by the MGH panel
- The final diagnosis of the case
- Which of the MGH panel differential diagnoses did Isabel contain
- Did Isabel suggest the Final diagnosis

***Differential Diagnoses considered by the MGH panel:***

Pulmonary embolism

Nephrotic syndrome - Membranous glomerulonephritis

***Final Diagnosis of the case according to NEJM:***

Membranous glomerulonephritis with the nephrotic syndrome and pulmonary embolus.

***Differential Diagnoses of the cases given by Isabel:***

Pulmonary embolism (PE)– under Respiratory System Disorders heading

Nephrotic syndrome (NS)– under Nephrology heading

***Was the final diagnosis given by Isabel:***

Yes, under PE under Respiratory system disorders and NS under Nephrology heading

***Isabel Differential:***

<p><b>INFECTIOUS DISEASES</b> &lt;&lt; click to expand</p> <p><a href="#">Tuberculosis</a> 47% ? <a href="#">Related Dx</a></p>	<p><b>RESPIRATORY SYSTEM DISORDERS</b> &lt;&lt; click to expand</p> <p><input type="checkbox"/> <a href="#">Pulmonary Thromboembolism</a> 65% ? <a href="#">Related Dx</a></p>
<p><b>RHEUMATIC DISEASES</b> &lt;&lt; click to expand</p> <p><input type="checkbox"/> <a href="#">SLE</a> 56% ? <a href="#">Related Dx</a></p>	<p><b>Why did this diagnosis come up ?</b> <input type="checkbox"/></p> <p><b>We matched the terms:</b> chest pain   coughing   cough   hemoptysis   bloody sputum   tachypnea   rapid breathing   fever   fevers   lower extremity edema   lower limb edema   tachycardia   tachycardic   rapid heart rate   elevated troponin   elevated troponin i   elevated troponin t   right   ventricular   elev   elevated jugular venous pressure   elevated</p> <p><b>Degree of match (NOT clinical probability) : 65%</b></p> <p><a href="#">Pulmonary Embolism and Infarction</a></p> <p><input type="checkbox"/> <a href="#">Sarcoidosis</a> 50% ? <a href="#">Related Dx</a></p>
<p><b>CARDIAC DISORDERS</b> &lt;&lt; click to expand</p> <p><a href="#">Heart Failure / CHF</a> 62% ? <a href="#">Related Dx</a></p> <p><input type="checkbox"/> <a href="#">Cardiomyopathy</a> 51% ? <a href="#">Related Dx</a></p> <p><a href="#">Pulmonary Hypertension Disorder</a> 55% ? <a href="#">Related Dx</a></p> <p><input type="checkbox"/> <a href="#">Myocarditis</a> 59% ? <a href="#">Related Dx</a></p>	<p><b>HEMATOLOGY</b> &lt;&lt; click to expand</p> <p><input type="checkbox"/> <a href="#">Sickle Cell Disease / Crisis</a> 50% ? <a href="#">Related Dx</a></p>
<p><b>SHOCK STATES</b></p> <p><a href="#">Cardiogenic Shock</a> 51% ? <a href="#">Related Dx</a></p>	<p><b>UROLOGIC DISORDERS</b></p> <p><input type="checkbox"/> <a href="#">Neoplasms of the Kidney</a> 48% ? <a href="#">Related Dx</a></p>
<p><b>TRAUMA INJURIES</b></p> <p><a href="#">Cardiac Contusion</a> 24% ? <a href="#">Related Dx</a></p>	<p><b>NEPHROLOGY</b> &gt;&gt; click to collapse</p> <p><input type="checkbox"/> <a href="#">Renal Failure</a> 51% ? <a href="#">Related Dx</a></p> <p><input type="checkbox"/> <a href="#">Nephrotic Syndrome</a> 57% ? <a href="#">Related Dx</a></p> <p><b>Why did this diagnosis come up ?</b> <input type="checkbox"/></p> <p><b>We matched the terms:</b> hematuria   hyperlipidemia   hypoalbuminemia   increased rr   proteinuria   level   levels   natriuret   natriuretic   peptid   peptide   lipoprotein</p> <p><b>Degree of match (NOT clinical probability) : 57%</b></p> <p><a href="#">Diabetic Nephropathy</a> 49% ? <a href="#">Related Dx</a></p> <p><a href="#">Renal Arterial Thrombosis</a> 39% ? <a href="#">Related Dx</a></p>