

**Case 13 (April 24 2008):** [N Engl J Med. 358\(17\):1838-1848](#)

**Demographic:** Male, 46yrs, America North, General speciality

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

anorexia  
generalized lymphadenopathy  
neutropenia  
leucopenia  
monoclonal serum immunoglobulin

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

anorexia  
generalized lymphadenopathy  
neutropenia  
leucopenia

**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:***

Monoclonal Gammopathy - Gamma heavy-chain disease  
Aggressive Non-Hodgkin's lymphomas

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

Gamma heavy-chain disease and rheumatoid arthritis.

***Differential Diagnoses of the case as given by Isabel:***

Gamma heavy-chain disease

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

Yes, under Immunologic system heading

**Isabel Differential:**

<p><b>INFECTIOUS DISEASES</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Measles Infection <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>Influenza and Parainfluenza Viruses <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>EBV Infection <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>Tuberculosis <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>HIV / AIDS <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>Arboviral Infections / Encephalitides <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	<p><b>RHEUMATIC DISEASES</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>SLE <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>
<p><b>IMMUNOLOGIC SYSTEM</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Hyper IgM Syndrome <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>Light Chain / Heavy Chain Deletions <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul> <div style="border: 1px solid black; background-color: #ffff00; padding: 5px;"> <p><b>Why did this diagnosis come up ?</b> <span style="float: right;">✕</span></p> <p><b>We matched the terms:</b> generalized lymphadenopathy   monoclon   monoclonal   serum   immunoglobulin</p> <p><b>Degree of match between query entered and isabel database (Not clinical probability): 48%</b></p> </div> <ul style="list-style-type: none"> <li>Gamma Heavy-Chain Disease <input type="checkbox"/> <a href="#">? Related Dx</a></li> <li>Autoimmune Neutropenia <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	<p><b>HEMATOLOGY</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Hematologic HIV Manifestations <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul> <p><b>RESPIRATORY DISORDERS</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Pulmonary TB <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul> <p><b>NEUROMUSCULAR DISORDERS</b></p> <ul style="list-style-type: none"> <li>Polyneuropathy Disorders <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul> <p><b>NEOPLASTIC DISEASES</b></p> <ul style="list-style-type: none"> <li>Leukemia <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul> <p><b>ALLERGIC DISORDERS</b></p> <ul style="list-style-type: none"> <li>Serum Sickness <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>
<p><b>ORTHOPEDIC DISORDERS</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Malignant Bone Tumors <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	
<p><b>NEPHROLOGY</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Renal Failure <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	
<p><b>TOXICOLOGY</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li>Industrial / Household Toxicity <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	
<p><b>CARDIAC DISORDERS</b></p> <ul style="list-style-type: none"> <li>Infective Endocarditis <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	
<p><b>HUMAN GENETICS</b></p> <ul style="list-style-type: none"> <li>Cohen Syndrome <input type="checkbox"/> <a href="#">? Related Dx</a></li> </ul>	