

**Case 18 (June 12 2008):** [N Engl J Med. 358\(24\):2619-2628](#)

**Demographic:** Male, 68 yrs, America North, General speciality

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

immunosuppressed  
persistent anorexia  
fatigue  
headaches  
scalp tenderness  
jaw claudication  
elevated CRP  
blurred vision  
hypertension  
hypertropia  
nystagmus  
facial nerve palsy  
unilateral vision loss

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

blurred vision  
hypertension  
fatigue  
facial nerve palsy  
headaches  
nystagmus

**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:***

Giant Cell Arteritis  
Anterior Ischemic Optic Neuropathy  
Cryptococcal Infection  
Aspergillus Infection

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

Ischemic Optic Neuropathy resulting from Aspergillus Infection mimicking Giant Cell Arteritis

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

Giant Cell Arteritis – under Rheumatic diseases heading  
Anterior Ischemic Optic Neuropathy – under Ophthalmology heading  
Cryptococcal Infection- under Infectious diseases heading  
Aspergillus Infection -under Infectious diseases heading

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

Yes, Ischemic Optic Neuropathy – under Ophthalmology heading  
Aspergillus Infection – Under Infectious diseases heading  
Giant Cell Arteritis – Under Rheumatic diseases heading

### Isabel Differential:

<p><b>- INFECTIOUS DISEASES</b> &gt;&gt; click to collapse</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Tuberculosis</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Fungal Meningitis</a> <span style="float: right;">? RD</span> <ul style="list-style-type: none"> <li><a href="#">Lyme Disease</a> <span style="float: right;">? RD</span></li> <li><a href="#">Rocky Mountain Spotted Fever</a> <span style="float: right;">? RD</span></li> </ul> </li> <li><input checked="" type="checkbox"/> <a href="#">CMV Infections</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Brucellosis</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Cryptococcus Neoformans</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Aspergillus Infection</a> <span style="float: right;">? RD</span></li> </ul> <div style="border: 1px solid black; background-color: #ffff00; padding: 5px; margin: 5px 0;"> <p><b>Why did this diagnosis come up ?</b></p> <p>We matched the terms: htn   malaise   headache   headaches   immunosuppress   immunosuppressed   vision   loss</p> <p><b>Degree of match between query entered and isabel database (Not clinical probability): 40%</b></p> </div> <ul style="list-style-type: none"> <li><input type="checkbox"/> <a href="#">Mumps Infection</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Toxoplasmosis</a> <span style="float: right;">? RD</span> <ul style="list-style-type: none"> <li><a href="#">Microsporidiosis</a> <span style="float: right;">? RD</span></li> </ul> </li> <li><input checked="" type="checkbox"/> <a href="#">Syphilis</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Bartonella Infection</a> <span style="float: right;">? RD</span></li> </ul>	<p><b>+ NERVOUS SYSTEM DISORDERS</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">CVA / Stroke</a> <span style="float: right;">? RD</span></li> </ul> <p><b>+ TOXICOLOGY</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Radioactive Isotopes</a> <span style="float: right;">? RD</span></li> </ul> <p><b>+ RESPIRATORY DISORDERS</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Atypical Pneumonia</a> <span style="float: right;">? RD</span></li> </ul> <p><b>ENDOCRINE SYSTEM</b> <span style="float: right;">? RD</span></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Hypothyroidism</a> <span style="float: right;">? RD</span></li> </ul> <p><b>+ NEOPLASTIC DISEASES</b> &lt;&lt; click to expand</p> <p><b>+ SHOCK STATES</b> &lt;&lt; click to expand</p> <p><b>+ DERMATOLOGY</b> &lt;&lt; click to expand</p>
<p><b>- RHEUMATIC DISEASES</b> &gt;&gt; click to collapse</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">SLE</a> <span style="float: right;">? RD</span> <ul style="list-style-type: none"> <li><a href="#">Henoch-Schonlein Purpura</a> <span style="float: right;">? RD</span></li> </ul> </li> <li><input checked="" type="checkbox"/> <a href="#">Giant Cell Arteritis</a> <span style="float: right;">? RD</span></li> </ul> <div style="border: 1px solid black; background-color: #ffff00; padding: 5px; margin: 5px 0;"> <p><b>Why did this diagnosis come up ?</b></p> <p>We matched the terms: blurred vision   blurring of vision   htn   headache   headaches   scalp   tender   tenderness   jaw   claudic   claudication   vision</p> <p><b>Degree of match between query entered and isabel database (Not clinical probability): 61%</b></p> </div> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Systemic Sclerosis</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Antiphospholipid Syndrome</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Aortic Arch Syndrome</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Relapsing Polychondritis</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Amyloidosis</a> <span style="float: right;">? RD</span></li> </ul>	<p><b>+ OPHTHALMOLOGY</b> &lt;&lt; click to expand</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Ischemic Optic Neuropathy</a> <span style="float: right;">? RD</span></li> </ul> <div style="border: 1px solid black; background-color: #ffff00; padding: 5px; margin: 5px 0;"> <p><b>Why did this diagnosis come up ?</b></p> <p>We matched the terms: htn   fatigue   headache   headaches   scalp   tender   tenderness   jaw   claudic   claudication   unilater   unilateral   vision   loss</p> <p><b>Degree of match between query entered and isabel database (Not clinical probability): 60%</b></p> </div> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Acute Visual Loss</a> <span style="float: right;">? RD</span></li> </ul>
<p><b>CARDIAC DISORDERS</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <a href="#">Systemic Hypertension Disorders</a> <span style="float: right;">? RD</span></li> <li><input checked="" type="checkbox"/> <a href="#">Hypotensive Disorders</a> <span style="float: right;">? RD</span></li> </ul> <p><b>+ NEPHROLOGY</b> &lt;&lt; click to expand</p> <p><b>+ HEMATOLOGY</b> &lt;&lt; click to expand</p> <p><b>+ TRAUMA INJURIES</b> &lt;&lt; click to expand</p> <p><b>+ ENVIRONMENTAL HEALTH HAZARDS</b> &lt;&lt; click to expand</p>	