

**Case 4 (February 8 2007):** [N Engl J Med 2007;356:612-20](#)

**Demographic:** Female, 56yrs, Not Pregnant, America North, General speciality

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

dysarthria  
dizziness  
vertigo  
nausea  
vomiting  
ataxia  
oscillopsia  
blurred vision  
diplopia  
nystagmus  
tremor  
dysphagia  
memory and cognitive deficits  
proximal leg weakness  
dysmetria  
dysdiadochokinesia

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

dysarthria  
dizziness  
vertigo  
vomiting  
blurred vision  
diplopia  
dysphagia  
dysmetria  
ataxia

**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:***

Paraneoplastic Syndromes Affecting the Central Nervous System  
Neoplasm - Breast cancer  
Sarcoidosis

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

Paraneoplastic syndrome with paraneoplastic cerebellar degeneration, probably associated with anti-Yo antibodies and a primary breast cancer.

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

Paraneoplastic Neurologic Syndromes – Isabel 1<sup>st</sup> page

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

Yes, Isabel 1<sup>st</sup> page

***Entire presentation cut and pasted into the Isabel query box:***

None of the above

**Isabel differential:**

<b>NERVOUS SYSTEM DISORDERS</b> << <a href="#">Click here</a>	<b>NEUROMUSCULAR DISORDERS</b> << <a href="#">Click here</a>
<ul style="list-style-type: none"> <li><a href="#">Multiple Sclerosis</a> <b>RD</b></li> <li><a href="#">Paraneoplastic Neurologic Syndrome</a> <b>RD</b></li> <li><a href="#">CVA / Stroke</a> <b>RD</b></li> <li>+ <a href="#">Ataxic Disorders</a> <b>RD</b></li> <li>+ <a href="#">Transient Ischemic Attack</a> <b>RD</b></li> <li>+ <a href="#">Migraine</a> <b>RD</b></li> <li>+ <a href="#">Intracranial Hypertension</a> <b>RD</b></li> <li><a href="#">Intracranial Hemorrhage</a> <b>RD</b></li> </ul>	<ul style="list-style-type: none"> <li><b>TOXICOLOGY</b> &lt;&lt; <a href="#">Click here</a></li> <li>+ <a href="#">Radioactive Isotopes</a> <b>RD</b></li> </ul>
	<b>INFECTIOUS DISEASES</b> << <a href="#">Click here</a>
	+ <a href="#">Botulism</a> <b>RD</b>
	<b>LIVER DISORDERS</b> << <a href="#">Click here</a>
	<b>TRAUMA INJURIES</b> << <a href="#">Click here</a>
<b>RHEUMATIC DISEASES</b> << <a href="#">Click here</a>	
<b>NEOPLASTIC DISEASES</b> << <a href="#">Click here</a>	
<b>GASTROINTESTINAL DISORDERS</b> << <a href="#">Click here</a>	
<b>ENVIRONMENTAL HEALTH HAZARDS</b> << <a href="#">Click here</a>	