

**Case 40 (December 25 2008):** [N Engl J Med. 359\(26\):2825-2833](#)

**Demographic:** Male, 26 yrs, America North, General speciality

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

periorbital pain  
nasal congestion  
headache  
hypertension  
tachycardia  
swollen eye  
nasal discharge  
decreased visual acuity  
dyschromatopsia

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

hypertension  
nasal congestion  
nasal discharge  
headache  
tachycardia  
dyschromatopsia  
decreased visual acuity

**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:**

Optic neuritis  
Meningiomas

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

Allergic fungal sinusitis

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

Optic neuritis – under Ophthalmology heading  
Meningiomas – under Nervous system heading

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

Yes, Fungal sinusitis – under Respiratory diseases heading

**Isabel Differential:**

<b>+ INFECTIOUS DISEASES</b> << click to expand	<b>+ RESPIRATORY DISORDERS</b> << click to expand
<input type="checkbox"/> <a href="#">Influenza and Parainfluenza Viruses</a> ? RD	<input checked="" type="checkbox"/> <a href="#">Sarcoidosis</a> ? RD
<input type="checkbox"/> <a href="#">Measles Infection</a> ? RD	<input type="checkbox"/> <a href="#">Sinusitis</a> ? RD
<b>+ NERVOUS SYSTEM DISORDERS</b> << click to expand	<b>Why did this diagnosis come up ?</b>
<input type="checkbox"/> <a href="#">Headache Disorders</a> ? RD	We matched the terms: htn   nasal congestion   rhinorrhea   periorbit   periorbital   pain   ey   eye
<input type="checkbox"/> <a href="#">Intracranial Hypertension</a> ? RD	Degree of match between query entered and isabel database (Not clinical probability): 54%
<input type="checkbox"/> <a href="#">Cerebral Sinus Venous Thrombosis</a> ? RD	<input type="checkbox"/> Bacterial Rhinosinusitis
<b>GASTROINTESTINAL DISORDERS</b>	<input checked="" type="checkbox"/> <b>Fungal Rhinosinusitis</b>
<input type="checkbox"/> <a href="#">Food Poisoning</a> ? RD	<input type="checkbox"/> Common Cold / Nasopharyngitis ? RD
<b>- OPHTHALMOLOGY</b> >> click to collapse	<b>+ ENDOCRINE SYSTEM</b> << click to expand
<input type="checkbox"/> <a href="#">Optic Neuritis</a> ? RD	<input checked="" type="checkbox"/> <a href="#">Hyperthyroidism</a> ? RD
<input type="checkbox"/> <a href="#">Neoplasms of the Eye</a> ? RD	<b>+ RHEUMATIC DISEASES</b> << click to expand
<input type="checkbox"/> <a href="#">Refraction Abnormalities</a> ? RD	<b>+ TOXICOLOGY</b> << click to expand
<input type="checkbox"/> <a href="#">Uveitis</a> ? RD	<b>+ HEMATOLOGY</b> << click to expand
<input type="checkbox"/> <a href="#">Endophthalmitis</a> ? RD	<b>+ NUTRITIONAL DISORDERS</b> << click to expand
<input type="checkbox"/> <a href="#">Trauma to the Eye</a> ? RD	<b>+ TRAUMA INJURIES</b> << click to expand
<b>+ NEPHROLOGY</b> << click to expand	
<b>+ ENVIRONMENTAL HEALTH HAZARDS</b> << click to expand	