

Case 37 (November 27 2008): [N Engl J Med. 359\(22\):2367-2377](#)

Demographic: Male, 17yrs, America North, General speciality

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

headache
mood changes
worsening academic performance
fatigue
cold intolerance
weight gain
bitemporal hemianopia
decreased visual acuity
acanthosis nigricans
hyperprolactinemia
skull-base lesion

Synonyms used by Isabel for the above query:

Headaches
Mood changes
Fatigue
Cold intolerance
Weight gain
Hyperprolactinemia

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:

Pituitary adenoma (prolactinoma)

Brain neoplasm

Final Diagnosis of the case according to NEJM:

Pituitary adenoma (prolactinoma), prolactin secreting, with atypical features and a high proliferation fraction. Osteoblastoma of the skull.

Differential Diagnoses of the case as given by Isabel:

Prolactinoma – under Endocrine system heading

Brain neoplasm – under Nervous system disorders heading

Was the final diagnosis given by Isabel:

Yes, Prolactinoma under Endocrine system heading and Brain neoplasms under Nervous system disorders heading

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Isabel Differential:

- ENDOCRINE SYSTEM >> click to collapse	- NERVOUS SYSTEM DISORDERS >> click to collapse
<input type="checkbox"/> Hypothyroidism ? RD	<input type="checkbox"/> Intracranial Hemorrhage ? RD
<input type="checkbox"/> Type 2 Diabetes ? RD	<input type="checkbox"/> Paroxysmal Dyskinesias ? RD
<input type="checkbox"/> Insulin Resistance Syndrome ? RD	<input type="checkbox"/> Cerebral Sinus Venous Thrombosis ? RD
<input type="checkbox"/> Secondary Adrenal Insufficiency ? RD	<input type="checkbox"/> Cavernous Sinus Thrombosis
<input type="checkbox"/> Pituitary Neoplasms ○ RD	<input type="checkbox"/> Lateral Sinus Thrombosis
<div style="border: 1px solid black; background-color: #ffff00; padding: 5px;"> <p>Why did this diagnosis come up ?</p> <p>We matched the terms: hyperprolactinemia headache headaches perform performance bitempor bitemporal hemianopia skull base lesion</p> <p>Degree of match between query entered and isabel database (Not clinical probability): 58%</p> <p>Acromegaly</p> <p>Prolactinoma</p> <p>McCune-Albright Syndrome ? RD</p> <p>Empty Sella Syndrome ? RD</p> </div>	<input type="checkbox"/> Sagittal Sinus Thrombosis
	<input type="checkbox"/> Septic Intracranial Thrombophlebitis
	<input type="checkbox"/> Mitochondrial Encephalomyopathies ? RD
	<input type="checkbox"/> Chronic Fatigue Syndrome ? RD
	<input type="checkbox"/> Brain Neoplasms ? RD
	RESPIRATORY DISORDERS
	<input type="checkbox"/> Sleep Apnea ? RD
	+ DERMATOLOGY << click to expand
	+ NEOPLASTIC DISEASES << click to expand
	+ TOXICOLOGY << click to expand
	+ CARDIAC DISORDERS << click to expand
	+ LIVER DISORDERS << click to expand
+ INFECTIOUS DISEASES << click to expand	
<input type="checkbox"/> Tuberculosis ? RD	
OPHTHALMOLOGY	
<input type="checkbox"/> Acute Visual Loss ? RD	
+ PSYCHOLOGIC DISORDERS << click to expand	
+ RHEUMATIC DISEASES << click to expand	
+ NEPHROLOGY << click to expand	
+ HUMAN GENETICS << click to expand	