



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