
Demographic: Male, 43 years, America North, General speciality

Clinical features extracted from the case and entered into the query box:
- insomnia
- fatigue
- joint pains
- cold intolerance
- anxiety
- Diabetes Insipidus
- weakness in proximal thighs
- somnolence
- ataxia
- depressed mood
- dysarthria
- exophthalmos
- bilateral hydronephrosis
- muscle pains
- gait imbalance

Synonyms used by Isabel for the above query:
- Diabetes Insipidus
- Insomnia
- Fatigue
- Joint pains
- Cold intolerance
- Anxiety
- Somnolence
- Ataxia
- Depressed mood
- Dysarthria
- Exophthalmos
- Muscle pains

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:**
Sarcoidosis
Systemic histiocytosis

**Final Diagnosis of the case according to NEJM:**
Erdheim-Chester Disease

**Differential Diagnoses of the case as given by Isabel:**
Sarcoidosis – under Respiratory disorders heading
Erdheim-Chester Disease – under Neoplastic diseases heading

**Was the final diagnosis given by Isabel:**
Yes, Erdheim-Chester Disease under Neoplastic diseases heading
**Isabel Differential:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Diagnosis</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>NERVOUS SYSTEM DISORDERS</td>
<td>Migraine</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>CVA / Stroke</td>
<td>100%</td>
</tr>
<tr>
<td>ENDOCRINE SYSTEM</td>
<td>Hypothyroid</td>
<td>100%</td>
</tr>
<tr>
<td>GASTROINTESTINAL DISORDERS</td>
<td>Food Poisoning</td>
<td>100%</td>
</tr>
<tr>
<td>RHEUMATIC DISEASES</td>
<td>Erdheim-Chester Disease</td>
<td>100%</td>
</tr>
<tr>
<td>NEOPLASTIC DISEASES</td>
<td>Langerhans Cell Histiocytosis Class 1</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Malignant Melanoma</td>
<td>100%</td>
</tr>
<tr>
<td>INFECTIOUS DISEASES</td>
<td>Measles Infection</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Bacterial Meningitis</td>
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<tr>
<td></td>
<td>Viral Meningoencephalitis</td>
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<tr>
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<td>Atypical Pneumonia</td>
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<tr>
<td></td>
<td>Lung Neoplasms</td>
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<tr>
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<tr>
<td>ENVIRONMENTAL HEALTH</td>
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</tr>
</tbody>
</table>

**Why did this diagnosis come up?**
We matched the terms: ataxia | ataxy | diabetes insipidus | dizziness | dysarthria | daytime | hypertension | depressed mood | joint pain | joint pain | propaxis | exophthalmos | weakness | weakness | gait | imbalance

Degree of match between query entered and Isabel database (Not clinical probability): 45%

**Langerhans Cell Histiocytosis Class 1**

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