

Case 22 (July 21 2005): [N Engl J Med 2005;353:287-95](#)

Demographic: Male, 81 yrs, America North, General speciality

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

fever
chills
productive cough
diffuse weakness
progressive anorexia
confusion
lethargy
irregular pulse
tachycardic
hypertensive
tachypnoeic
low oxygen saturations
axilla lymphadenopathy
systolic ejection murmur at upper sternal border
palpable spleen
mild confusion
truncal weakness

Synonyms used by Isabel for the above query:

irregular pulse
lethargy
confusion
productive cough
palpable spleen
fever

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:

Herpes Simplex Encephalitis
West Nile Encephalitis
Chronic Lymphocytic Leukemia
Aseptic Meningitis – Enterovirus
St Louis Encephalitis
Eastern Equine Encephalitis
Powassan Virus
Partially treated Meningococcus and Pneumococcal Meningitis
Listeria Meningoencephalitis

Final Diagnoses of the case according to NEJM:

Encephalomyelitis due to West Nile Virus
Chronic Lymphocytic Leukemia

Differential Diagnoses of the case as given by Isabel:

Herpes Simplex Encephalitis - No
West Nile Encephalitis – Yes, 1st page
Chronic Lymphocytic Leukemia – Yes Click on Neoplastic diseases heading
Aseptic Meningitis – Enterovirus - No
St Louis Encephalitis - No
Eastern Equine Encephalitis - No
Powassan Virus - No
Partially treated Meningococcus and Pneumococcal Meningitis - No

Listeria Meningoencephalitis - No

Was the final diagnosis given by Isabel:

Encephalomyelitis due to West Nile Virus – Yes, 1st page

Chronic Lymphocytic Leukemia – Click on Neoplastic diseases heading

Entire presentation cut and pasted into the Isabel query box:

Herpes Simplex Encephalitis - No

West Nile Encephalitis - No

Chronic Lymphocytic Leukemia – Yes, 1st page

Aseptic Meningitis - No

St Louis Encephalitis - No

Eastern Equine Encephalitis - No

Powassan Virus - No

Partially treated Meningococcus and Pneumococcal Meningitis – Click on Infectious diseases heading

Listeria Meningoencephalitis - No

Isabel differential for extracted features:

ENDOCRINE SYSTEM << Click here <u>Hyperthyroidism</u> RD	SHOCK STATES << Click here <u>Cardiogenic Shock</u> RD ↳ <u>Sepsis and Shock</u> RD
INFECTIOUS DISEASES << Click here <u>Lyme Disease</u> RD ↳ <u>Arboviral Infections / Encephalitides</u> RD † <u>West Nile Encephalitis</u> RD	RESPIRATORY SYSTEM DISORDERS << Click here ↳ <u>Lung Neoplasms</u> RD <u>COPD</u> RD
NEOPLASTIC DISEASES << Click here	RHEUMATIC DISEASES << Click here <u>SLE</u> RD
LIVER DISORDERS << Click here	CARDIAC DISORDERS << Click here ↳ <u>Cardiomyopathy</u> RD
TOXICOLOGY << Click here	