

Case 27 (August 31 2006): [N Engl J Med 2006;355:941-8](#)

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

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

fever
rigors
weight loss
anemia
hepatomegaly
multiple hypodense lesions of liver and spleen
enlarged abdominal lymph nodes

Synonyms used by Isabel (optional) for the above query:

Fever
Weight loss
Hepatomegaly

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:

Noninfectious cause

- Hodgkin's and Non-Hodgkin's lymphoma
- Acute leukemia

Infectious cause

Pyogenic bacteria

- Salmonella
- Staphylococci and streptococci
- Anaerobes
- Enteric organisms
 - Bartonella henselae*
 - Nocardia
 - Yersinia pseudotuberculosis* or *Y. enterocolitica*
 - Listeria monocytogenes*
 - Campylobacter jejuni*
 - Fusobacterium nucleatum*
 - Legionella pneumophila*
- *Entamoeba histolytica*
- Echinococcus
- *Mycobacterium tuberculosis*

Final Diagnoses of the case according to NEJM:

Hepatitis caused by *Bartonella henselae* (Cat-scratch disease)

Differential Diagnoses of the case as given by Isabel:

Liver abscess – Isabel 1st page

Cat-scratch disease – Isabel 1st page

Non-Hodgkin's lymphoma – Isabel 1st page

Tubercelulosis - *Mycobacterium tuberculosis* – Isabel 1st page

Yersinia infection – Isabel 1st page

Listeriosis – Isabel 1st page

Hodgkin's disease – Isabel 2nd page

Amoebiasis - *Entamoeba histolytica* – Isabel 2nd page

Salmonella – Isabel 3rd page

Nocardia infection – click on a heading

Was the final diagnosis given by Isabel:

Yes, Isabel 1st page

Entire presentation cut and pasted into the Isabel query box:

Staphylococcal Toxic Shock Syndrome – Isabel 1st page

Liver abscess – Isabel 1st page

Cat-scratch disease – Isabel 1st page

Tubercelulosis - Isabel 1st page 95%

Isabel differential for multiple hypodense lesions in liver and spleen:

GASTROINTESTINAL DISORDERS ▾		
↳ Liver Abscess	57%	R
Abdominal Abscesses	44%	R
INFECTIOUS DISEASES ▾		
Histoplasmosis	45%	R
↳ Yersinia Infection	44%	R
↳ CNS TB & TB Meningitis	39%	R
↳ Bartonella Infection	38%	R
↳ Candidal Infection	36%	R
↳ Tuberculosis	36%	R
Brucellosis	36%	R
HEMATOLOGY ▾		
Sickle Cell Disease / Crisis	37%	R
Spur Cell Anemia	37%	R
IMMUNOLOGIC SYSTEM ▾		
Chronic Granulomatous Disease	36%	R
NERVOUS SYSTEM DISORDERS ▾		
↳ Intracranial Abscess	49%	R
Intracranial Hemorrhage	45%	R
NEOPLASTIC DISEASES ▾		
↳ Liver Neoplasms	47%	R
ENDOCRINE SYSTEM ▾		
Pituitary Neoplasms	41%	R
RESPIRATORY SYSTEM DISORDERS ▾		
Sarcoidosis	39%	R
HUMAN GENETICS ▾		
Wilson's Disease	39%	R
DERMATOLOGY ▾		
↳ Mast Cell Disease	37%	R
↳ Lipodystrophy	36%	R

Isabel differential for extracted features:

NEOPLASTIC DISEASES ▾		
↳ Non-Hodgkin's Lymphoma	55%	R
Adenocarcinoma	43%	R
↳ Liver Neoplasms	40%	R
Enteropathy-Associated T-Cell Lymphoma	37%	R
Carcinoid Tumors	36%	R
Kaposi Sarcoma	36%	R
Head and Neck Neoplasms	35%	R
Hodgkin's Disease	34%	R

RESPIRATORY SYSTEM DISORDERS ▾		
Pulmonary Complications of HIV	47%	R
Sarcoidosis	45%	R

RHEUMATIC DISEASES ▾		
Lymphomatoid Granulomatosis	46%	R
Polyarteritis Nodosa	27%	R

HEMATOLOGY ▾		
Hematologic HIV Manifestations	46%	R
Tuberculous Lymphadenitis	32%	R

IMMUNOLOGIC SYSTEM ▾		
COVID	36%	R

HUMAN GENETICS ▾		
Wilson's Disease	27%	R

GASTROINTESTINAL DISORDERS ▾		
↳ Liver Abscess	51%	R
Cholecystitis	30%	R
Tuberculosis GI Disease	30%	R

INFECTIOUS DISEASES ▾		
Adenoviral Infections	50%	R
↳ Bartonella Infection	43%	R
Brucellosis	42%	R
Histoplasmosis	42%	R
↳ Tuberculosis	40%	R
Yersinia Infection	40%	R
Relapsing Fever	38%	R
Listeriosis	37%	R
Mycobacterium Avium Complex in HIV / AIDS	37%	R
↳ Ascariasis	36%	R
Rat-Bite Fever	36%	R
Amoebiasis	36%	R
Penicillium Marneffeii Infection	36%	R
Tularemia	34%	R
↳ Salmonella Infections	29%	R

CARDIAC DISORDERS ▾		
Infective Endocarditis	34%	R
Heart Failure / CHF	18%	R

METABOLIC DISEASES ▾		
↳ Primary Dyslipidemias	17%	R