

Case 30 (September 29 2005): [N Engl J Med 2005;353:1387-94](#)

Demographic: Male, 56yrs, America North, General speciality

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

low-grade fever
immunocompromised
dry cough
nasal congestion
night sweats
epitrochlear and axillary lymphadenopathy
violaceous nodule with a necrotic eschar on the dorsum of hand

Synonyms used by Isabel for the above query:

dry cough
nasal congestion
night sweats

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:

Table 2. Differential Diagnosis of Lymphocutaneous Infection in a Patient Who Is Immunocompromised (without International Travel).

Bacterial infections

Bartonella henselae (cat scratch disease, bacillary angiomatosis)
Erysipelothrix rhusiopathiae
Francisella tularensis (ulceroglandular tularemia)
Nocardia species
Bacillus anthracis (cutaneous anthrax)
Rhodococcus equi
Yersinia pestis

Mycobacterial infections

Mycobacterium tuberculosis
Nontuberculous mycobacteria (*M. marinum*, *M. kansasii*, *M. abscessus*, *M. chelonae*, *M. fortuitum*, *M. haemophilum*, *M. avium* complex)

Fungal infections

Sporothrix schenckii
Coccidioides immitis
Blastomyces dermatitidis
Histoplasma capsulatum
Cryptococcus neoformans
Filamentous fungi

Viral infections

Parapoxvirus (orf from goats or sheep, also called infectious ecthyma)
Orthopoxvirus (cowpox)

Final Diagnoses of the case according to NEJM:

Bartonella henselae infection (cat scratch disease) in an immuno-compromised host.

Differential Diagnoses of the case as given by Isabel:

Bartonella (Cat-scratch disease) – Isabel 1st page
Anthrax (Cutaneous anthrax) – Isabel 1st page
Tuberculosis – Isabel 1st page
Tularemia – Isabel 1st page
Yersinia pestis - Isabel 1st page
Nocardia infection – click on Infectious diseases heading
Histoplasmosis - click on Infectious diseases heading
Ecthyma Gangrenosum – click on Dermatology heading

Was the final diagnosis given by Isabel:

Yes, Isabel 1st page

Entire presentation cut and pasted into the Isabel query box:

Bartonella (Cat-scratch disease) – click on Infectious diseases heading

Anthrax – Isabel 1st page

Tuberculosis – Isabel 1st page

Yersinia pestis - Isabel 1st page

Tularemia – click on Infectious diseases heading

Nocardia infection – click on Infectious diseases heading

Isabel differential:

RESPIRATORY SYSTEM DISORDERS << Click here	INFECTIOUS DISEASES << Click here
<p>Sarcoidosis RD</p> <p>↳ Lung Neoplasms RD</p>	<p>↳ Bartonella Infection RD</p> <p>Tularemia RD</p> <p>↳ Anthrax RD</p> <p>↳ Toxoplasmosis RD</p> <p>↳ Tuberculosis RD</p> <p>↳ Yersinia Infection RD</p> <p>Lyme Disease RD</p> <p>Chlamydia Trachomatis RD</p>
NEOPLASTIC DISEASES << Click here	NEUROMUSCULAR DISORDERS << Click here
DERMATOLOGY << Click here	ENVIRONMENTAL HEALTH HAZARDS << Click here
HEMATOLOGY << Click here	
CARDIAC DISORDERS << Click here	
RHEUMATIC DISEASES << Click here	