



www.isabelhealthcare.com

**Case 10 (March 31 2011):** [N Engl J Med. 364\(13\):1259-1270](#)

**Demographic:** Female, 60yrs, North America

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

fever  
confusion  
cytopenia  
hypofibrinogenemia  
hypertriglyceridemia  
hyperferritinemia  
splenomegaly

**Synonyms used by Isabel for the above query:**

fever  
altered mental status  
cytopenia  
hypofibrinogenemia  
hypertriglyceridemia  
hyperferritinemia  
splenomegaly

**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:**

Thrombotic thrombocytopenia purpura  
Bartonella henselae

**Final Diagnosis of the case according to NEJM:**

Hemophagocytic lymphohistiocytosis

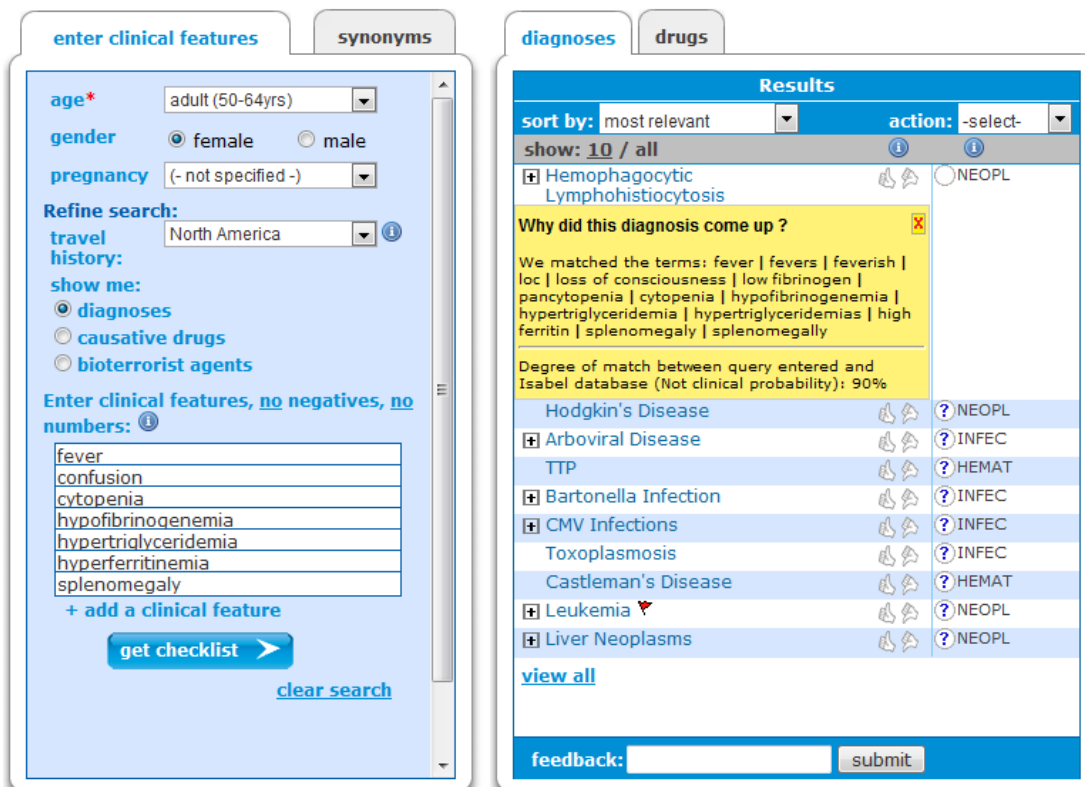
**Differential Diagnoses of the case as given by Isabel:**

Thrombotic thrombocytopenia purpura in Hematology  
 Bartonella henselae in Infectious

**Was the final diagnosis given by Isabel:**

Yes, Hemophagocytic lymphohistiocytosis in Neoplastic

**Isabel Checklist Differential:**



The screenshot shows the Isabel healthcare interface. On the left, the 'enter clinical features' tab is active, showing a form with fields for age (adult 50-64yrs), gender (female selected), pregnancy (- not specified -), and travel history (North America). Below these are options to refine search by travel history and 'show me' options for diagnoses, causative drugs, and bioterrorist agents. A list of clinical features is provided, including fever, confusion, cytopenia, hypofibrinogenemia, hypertriglyceridemia, hyperferritinemia, and splenomegaly. A 'get checklist' button is visible.

On the right, the 'diagnoses' tab is active, showing a 'Results' section. The 'sort by' is set to 'most relevant' and 'action' is '-select-'. The 'show' count is '10 / all'. The top result is 'Hemophagocytic Lymphohistiocytosis' (NEOPL). Below this is a yellow box titled 'Why did this diagnosis come up?' containing a list of matched terms: fever, fevers, feverish, loc, loss of consciousness, low fibrinogen, pancytopenia, cytopenia, hypofibrinogenemia, hypertriglyceridemia, hypertriglyceridemias, high ferritin, splenomegaly, and splenomegally. The degree of match is 90%. Below this is a list of other diagnoses with their categories and question marks:

Diagnosis	Category
Hodgkin's Disease	NEOPL
Arboviral Disease	INFEC
TTP	HEMAT
Bartonella Infection	INFEC
CMV Infections	INFEC
Toxoplasmosis	INFEC
Castleman's Disease	HEMAT
Leukemia	NEOPL
Liver Neoplasms	NEOPL

At the bottom of the results section, there is a 'view all' link and a 'feedback' field with a 'submit' button.