

Case 9 (March 21 2013): [N Engl J Med. 368\(12\):1141-1150](#)

Demographic: Male, 9 years, North America

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

fever
cough
chest pain
red and watery eyes
lethargic
erythematous periorbital and cheek region
enlarged cervical lymph node
shortness of breath
tachypnea
weight loss

Synonyms used by Isabel for the above query:

fever
cough
chest pain
red and watery eyes
lethargic
shortness of breath
tachypnea
weight loss

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:

Langerhans' cell histiocytosis

Final Diagnosis of the case according to NEJM:

Hypersensitivity pneumonitis caused by Aspergillus fumigatus and A.flavus exposure

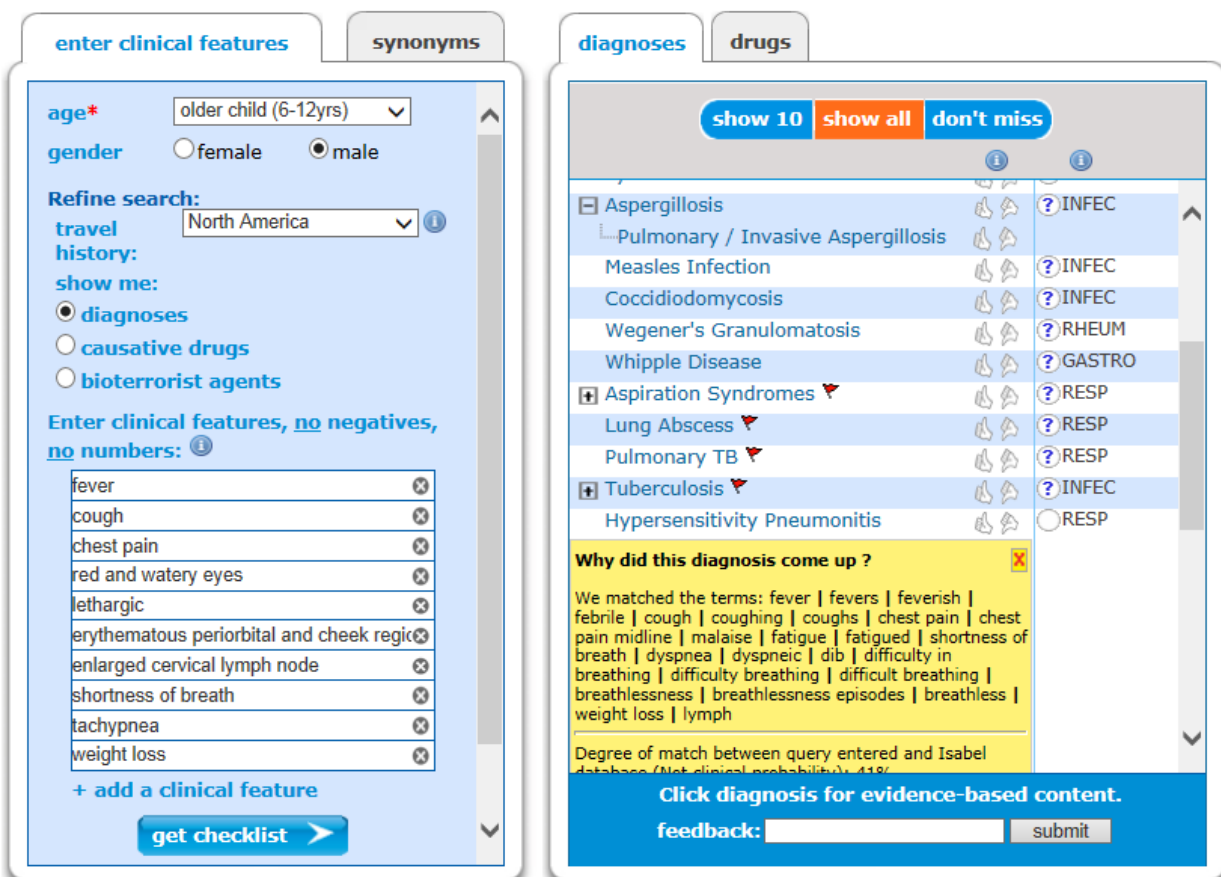
Differential Diagnoses of the case as given by Isabel:

Langerhans' cell histiocytosis in Neoplastic

Was the final diagnosis given by Isabel:

Yes, (i) Hypersensitivity pneumonitis in Respiratory
(ii) Aspergillus in infectious

Isabel Checklist Differential:



The screenshot displays the Isabel Checklist Differential interface, divided into two main panels: 'enter clinical features' and 'diagnoses'.

enter clinical features panel:

- age*:** older child (6-12yrs) (dropdown)
- gender:** female (radio), male (radio)
- Refine search:**
 - travel history:** North America (dropdown)
 - show me:**
 - diagnoses
 - causative drugs
 - bioterrorist agents
- Enter clinical features, no negatives, no numbers:**
 - fever (checkbox)
 - cough (checkbox)
 - chest pain (checkbox)
 - red and watery eyes (checkbox)
 - lethargic (checkbox)
 - erythematous periorbital and cheek regic (checkbox)
 - enlarged cervical lymph node (checkbox)
 - shortness of breath (checkbox)
 - tachypnea (checkbox)
 - weight loss (checkbox)
- + add a clinical feature**
- get checklist** (button)

diagnoses panel:

- show 10** (button), **show all** (button), **don't miss** (button)
- Diagnosis list:
 - Aspergillosis (dropdown) [?] INFEC
 - Pulmonary / Invasive Aspergillosis [?] INFEC
 - Measles Infection [?] INFEC
 - Coccidioidomycosis [?] INFEC
 - Wegener's Granulomatosis [?] RHEUM
 - Whipple Disease [?] GASTRO
 - Aspiration Syndromes [?] RESP
 - Lung Abscess [?] RESP
 - Pulmonary TB [?] RESP
 - Tuberculosis [?] INFEC
 - Hypersensitivity Pneumonitis [?] RESP
- Why did this diagnosis come up ?** (expandable section)
 - We matched the terms: fever | fevers | feverish | febrile | cough | coughing | coughs | chest pain | chest pain midline | malaise | fatigue | fatigued | shortness of breath | dyspnea | dyspneic | dib | difficulty in breathing | difficulty breathing | difficult breathing | breathlessness | breathlessness episodes | breathless | weight loss | lymph
 - Degree of match between query entered and Isabel database (Net clinical probability): 41%
- Click diagnosis for evidence-based content.**
- feedback:** (input field) **submit** (button)



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