

**Case 29 (September 21 2006):** [N Engl J Med 2006;355:1263-72](#)

**Demographic:** Female, 43yrs, not pregnant, America North, General speciality

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

painful nodules on the fingertips  
shortness of breath  
fatigue  
polyarthralgia  
decreased appetite  
urticarial rash  
dyspnea on exertion  
chest pain on inspiration  
nocturnal wheezing  
axillary lymphadenopathy  
fingers cool and cyanotic  
fingertips and big toe mottled, with small, violaceous, tender, subcutaneous nodules  
Splinter hemorrhages under fingernails  
Scattered ecchymoses on back, legs, arms, and abdomen  
mediastinal lymphadenopathy  
lymphopenia  
smoker  
chronic cough

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

polyarthralgia  
dyspnea on exertion  
lymphopenia  
chronic cough  
shortness of breath

**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:***

Bronchogenic carcinoma / Non-small cell lung cancer

Vasculitis

Thrombotic vascular occlusion

Endocarditis

Lymphadenopathy and pulmonary nodules

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

Non-small-cell lung cancer with associated nonbacterial thrombotic (marantic) endocarditis.

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

Non-small-cell lung cancer – Isabel 1<sup>st</sup> page

Infective Endocarditis – click on heading

SLE - Isabel 1<sup>st</sup> page

Raynaud's phenomenon – click on heading

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

Yes, Isabel 1<sup>st</sup> page

***Entire presentation cut and pasted into the Isabel query box:***

SLE - Isabel 1<sup>st</sup> page

**Isabel differential:**

| RESPIRATORY SYSTEM DISORDERS << Click here |     |    |
|--|-----|----|
| <u>Sarcoidosis</u>                         | 44% | RD |
| ↑ <u>Non-Small Cell Lung Cancer</u>        | 34% | RD |
| <u>Bronchogenic Carcinoma</u>              | 29% | RD |
| <u>Pulmonary Complications of HIV</u>      | 23% | RD |
| <u>Interstitial Lung Disease</u>           | 22% | RD |
| <u>Pulmonary TB</u>                        | 20% | RD |
| <u>Pulmonary Amyloidosis</u>               | 20% | RD |
| ↳ <u>Atypical Pneumonia</u>                | 19% | RD |

| GASTROINTESTINAL DISORDERS << Click here |     |    |
|--|-----|----|
| <u>Gastroesophageal Reflux</u>           | 28% | RD |

| NEUROMUSCULAR DISORDERS << Click here |     |    |
|---------------------------------------|-----|----|
| <u>Dermatomyositis / Polymyositis</u> | 27% | RD |

| NERVOUS SYSTEM DISORDERS << Click here |     |    |
|--|-----|----|
| <u>Thoracic Outlet Syndrome</u>        | 26% | RD |

| NEOPLASTIC DISEASES << Click here |     |    |
|-----------------------------------|-----|----|
| ↳ <u>Non-Hodgkin's Lymphoma</u>   | 22% | RD |

| CARDIAC DISORDERS << Click here |     |    |
|---------------------------------|-----|----|
| ↳ <u>Pericarditis</u>           | 21% | RD |
| <u>Infective Endocarditis</u>   | 20% | RD |
| ↳ <u>Ischemic Heart Disease</u> | 19% | RD |

| RHEUMATIC DISEASES << Click here       |     |    |
|--|-----|----|
| <u>SLE</u>                             | 38% | RD |
| ↳ <u>Neutrophilic Dermatoses</u>       | 27% | RD |
| <u>Systemic Sclerosis</u>              | 21% | RD |
| <u>Raynaud's Phenomenon</u>            | 19% | RD |
| <u>Mixed Connective Tissue Disease</u> | 19% | RD |

| INFECTIOUS DISEASES << Click here            |     |    |
|--|-----|----|
| ↳ <u>Influenza and Parainfluenza Viruses</u> | 29% | RD |
| <u>Brucellosis</u>                           | 28% | RD |
| <u>Tularemia</u>                             | 25% | RD |
| <u>Lyme Disease</u>                          | 25% | RD |
| ↳ <u>Bartonella Infection</u>                | 24% | RD |
| <u>Toxic Shock Syndrome</u>                  | 23% | RD |
| ↳ <u>Toxoplasmosis</u>                       | 23% | RD |
| <u>Tsutsuqamushi Disease</u>                 | 22% | RD |
| ↳ <u>Tuberculosis</u>                        | 20% | RD |

| DERMATOLOGY << Click here       |     |    |
|---------------------------------|-----|----|
| <u>Furuncles and Carbuncles</u> | 21% | RD |

