

**Case 19 (June 22 2006):** [N Engl J Med 2006;354:2697-704](#)

**Demographic:** Male, 22 months, America North, General Speciality

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

enlarging subcutaneous nodules on the legs, head and hand  
palpable lesion on index finger overlying the proximal interphalangeal joint  
bilateral patchy malar eczema  
firm, oval, nontender, slightly mobile subcutaneous nodule with indistinct edges was palpable in the postauricular area of the scalp  
subcutaneous nodules, with a slight blue tint of overlying skin  
cough  
mild prominence of the pulmonary interstitium

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

cough

**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:***

Erythema Nodosum  
Rheumatoid Nodules

Malignant Tumors: Hodgkin's disease / Non-Hodgkin's lymphoma, Mycosis fungoides, Sarcomas, Tumor of the peripheral-nerve sheath, Metastatic neuroblastoma, Histiocytosis.

Benign Tumors and Cysts: Histiocytomas, Dermatofibromas, Myofibromatosis, Dermoid and duct cysts, Neurofibromatosis, Pilomatrixomas.

Granuloma Annulare

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

Subcutaneous granuloma annulare

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

Granuloma annulare – Isabel 1<sup>st</sup> page

Neurofibromatosis – Isabel 1<sup>st</sup> page

Neuroblastoma – Isabel 1<sup>st</sup> page

Epidermoid cyst – Isabel 1<sup>st</sup> page

Non-melanoma skin cancer – Isabel 1<sup>st</sup> page

Pilomatricomas – Isabel 1<sup>st</sup> page

Farber lipogranulomatosis – Isabel 3<sup>rd</sup> page

Tuberous sclerosis – by clicking on a 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:***

None of the above

**Isabel differential:**

<b>INFECTIOUS DISEASES</b> ∨		
<a href="#">Atypical/Nontuberculous Mycobacteria</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Coccidioidomycosis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Sporotrichosis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Brucellosis</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Yersinia Infection</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Bacterial Meningitis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Tularemia</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Tuberculosis</a>	<input type="checkbox"/>	<b>R</b>
<b>SOCIAL ISSUES</b> ∨		
<a href="#">Abuse and Neglect</a>	<input type="checkbox"/>	<b>R</b>
<b>NEOPLASTIC DISEASES</b> ∨		
<a href="#">Neuroblastoma</a>	<input type="checkbox"/>	<b>R</b>
<b>NEUROMUSCULAR DISORDERS</b> ∨		
<a href="#">Dermatomyositis / Polymyositis</a>	<input type="checkbox"/>	<b>R</b>
<b>GASTROINTESTINAL DISORDERS</b> ∨		
↳ <a href="#">Hernias</a>	<input type="checkbox"/>	<b>R</b>
<b>METABOLIC DISEASES</b> ∨		
<a href="#">Farber Disease</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Primary Dyslipidemias</a>	<input type="checkbox"/>	<b>R</b>
<b>NERVOUS SYSTEM DISORDERS</b> ∨		
<a href="#">Neurofibromatosis</a>	<input type="checkbox"/>	<b>R</b>
<b>DERMATOLOGY</b> ∨		
<a href="#">Granuloma Annulare</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Non Melanomas Skin Cancer</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Hemangiomas</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Epidermoid Cyst</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Pilomatricoma</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Congen Melanocytic Nevus</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Tuberculosis of the Skin</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Photosensitivity Skin Disorders</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Necrotizing Fasciitis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Panniculitis</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Cutaneous Manifestations of Acute Rheumatic Fever</a>	<input type="checkbox"/>	<b>R</b>
<b>RHEUMATIC DISEASES</b> ∨		
<a href="#">Cutaneous Vasculitis</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Neutrophilic Dermatoses</a>	<input type="checkbox"/>	<b>R</b>
↳ <a href="#">Juvenile Rheumatoid Arthritis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Henoch-Schönlein Purpura</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Giant Cell Arteritis</a>	<input type="checkbox"/>	<b>R</b>
<a href="#">Hypertrophic Osteoarthropathy</a>	<input type="checkbox"/>	<b>R</b>