

**Case 12 (April 17 2008):** [N Engl J Med. 358\(16\):1713-1723](#)

**Demographic:** Female, Neonate, America North, General speciality

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

apnea  
oxygen desaturation  
cyanosis  
bradycardia  
bradypnea  
spastic hemiplegia  
seizures

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

Apnea  
Oxygen desaturation  
Cyanosis  
Bradycardia  
Seizures

**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:***

Chorioamnionitis  
Apneic Spells  
Perinatal Ischemic Stroke / Neonatal stroke

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

Neonatal stroke due to acute chorioamnionitis, with a severe fetal inflammatory response.

***Differential Diagnoses of the cases given by Isabel:***

Neonatal stroke – under Cardiac disorders  
Chorioamnionitis – under Obstetric disorders

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

Yes, under Cardiac disorders heading



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**Isabel Differential:**

<p><b>⊕ RESPIRATORY DISORDERS</b> &lt;&lt; click to expand</p> <p><a href="#">Neonatal Respiratory Distress</a> <input type="button" value="Related Dx"/></p> <p><a href="#">Hyaline Membrane Disease</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Bronchiolitis</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Neonatal Pneumonia</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Pneumothorax Conditions</a> <input type="button" value="Related Dx"/></p> <p><b>⊕ NERVOUS SYSTEM DISORDERS</b> &lt;&lt; click to expand</p> <p>⊕ <a href="#">Cerebral Sinus Venous Thrombosis</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Intracranial Hemorrhage</a> <input type="button" value="Related Dx"/></p> <p><b>⊕ METABOLIC DISEASES</b> &lt;&lt; click to expand</p> <p>⊕ <a href="#">Hypoglycemia Disorders</a> <input type="button" value="Related Dx"/></p> <p><b>⊕ GASTROINTESTINAL DISORDERS</b> &lt;&lt; click to expand</p> <p><a href="#">Gastroesophageal Reflux</a> <input type="button" value="Related Dx"/></p> <p><b>⊕ TOXICOLOGY</b> &lt;&lt; click to expand</p> <p>⊕ <a href="#">Drug Overdose/Poisoning</a> <input type="button" value="Related Dx"/></p> <p><b>OBSTETRIC DISORDERS</b></p> <p><a href="#">Chorioamnionitis</a> <input type="button" value="Related Dx"/></p> <p><b>Why did this diagnosis come up ?</b> <input type="button" value="X"/></p> <p><b>We matched the terms:</b> apnea   Cyanosis   Seizures   seizure</p> <p><b>Degree of match between query entered and Isabel database (Not clinical probability):</b> 40%</p>	<p><b>⊕ INFECTIOUS DISEASES</b> &lt;&lt; click to expand</p> <p>⊕ <a href="#">Bacterial Meningitis</a> <input type="button" value="Related Dx"/></p> <p><b>⊖ CARDIAC DISORDERS</b> &gt;&gt; click to collapse</p> <p><a href="#">Sinus Bradycardia</a> <input type="button" value="Related Dx"/></p> <p>⊖ <a href="#">Perinatal Cerebral Infarction</a> <input type="button" value="Related Dx"/></p> <p><b>Why did this diagnosis come up ?</b> <input type="button" value="X"/></p> <p><b>We matched the terms:</b> apnea   Cyanosis   oxygen desaturation   Seizures   seizure</p> <p><b>Degree of match between query entered and Isabel database (Not clinical probability):</b> 48%</p> <p><a href="#">Fetal Stroke</a></p> <p><a href="#">Neonatal Stroke</a></p> <p><a href="#">Persistent Pulm HTN of the Newborn</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Cyanotic CHD:Decreased Pulmonary Flow</a> <input type="button" value="Related Dx"/></p> <p>⊕ <a href="#">Left-to-Right Shunt Lesions</a> <input type="button" value="Related Dx"/></p> <p><b>⊕ HEMATOLOGY</b> &lt;&lt; click to expand</p> <p><a href="#">Deep Vein Thrombosis</a> <input type="button" value="Related Dx"/></p> <p><b>NEONATAL INFANT</b></p> <p><a href="#">Omphalitis</a> <input type="button" value="Related Dx"/></p> <p><b>NEPHROLOGY</b></p> <p>⊕ <a href="#">Urinary Tract Infection</a> <input type="button" value="Related Dx"/></p> <p><b>LIVER DISORDERS</b></p> <p><a href="#">Kernicterus</a> <input type="button" value="Related Dx"/></p>
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