

**Case 1 (January 11 2007):** [N Engl J Med 2006;356:174-182](#)

**Demographic:** Female, 40 yrs, America North, General speciality

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

menorrhagia  
prolonged menstruation  
bloody emesis  
epistaxis  
gingival bleeding  
easy bruising  
hoarseness  
difficulty swallowing  
neck swelling  
abdominal cramps  
headache  
confusion  
loss of consciousness  
agitation  
tachycardic  
bleeding  
ecchymoses  
petechiae  
prolonged thrombin time  
low hematocrit

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

loss of consciousness  
confusion  
easy bruising  
petechiae  
menorrhagia  
headache  
epistaxis  
abdominal cramps  
hoarsenes

## **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:***

Multiple Vitamin K deficiency  
Brodifacoum Ingestion / Superwarfarins Toxicity  
Disseminated Intravascular Coagulation

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

Multiple Vitamin K deficiency due to Brodifacoum ingestion

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

Multiple Vitamin K deficiency – Yes, 1<sup>st</sup> page  
Brodifacoum Ingestion / Superwarfarins Toxicity – Yes, click on Toxicology heading  
Disseminated Intravascular Coagulation – Yes, click on Hematology heading  
Stroke – No

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

Multiple Vitamin K deficiency - Yes, Isabel 1<sup>st</sup> page  
Brodifacoum Ingestion / Superwarfarins Toxicity – Yes, Click on Toxicology heading

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

Multiple Vitamin K deficiency - No  
Brodifacoum Ingestion / Superwarfarins Toxicity - No

**Isabel differential for extracted features:**

**Vitamin K deficiency**

<b>HEMATOLOGY</b> << Click here	<b>OBSTETRIC DISORDERS</b> << Click here
<u>Aplastic Anemia</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	<u>Puerperium Complications</u> ♀ <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>
<u>Vit K Deficiency</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	<b>GYNECOLOGICAL DISORDERS</b> << Click here
<u>Drug Induced Thrombocytopenia</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	↳ <u>Abnormal Uterine Bleeding</u> ♀ <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>
<u>Von Willebrand Disease</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	<b>PSYCHOLOGIC DISORDERS</b> << Click here
<u>Hereditary Deficiency of Platelet Storage Granules</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	↳ <u>Psychosomatic Illness</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>
<u>ITP</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	<b>ENDOCRINE SYSTEM</b> << Click here
<b>INFECTIOUS DISEASES</b> << Click here	<b>SHOCK STATES</b> << Click here
<u>Meningococcal Disease</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	

**Superwarfarins Toxicity – Click on Toxicology**

<b>TOXICOLOGY</b>	
↳ <u>Drug Overdose/Poisoning</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	
↳ <u>Substance Abuse</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	
↳ <u>Heavy Metal Intoxication</u> <span style="background-color: yellow; border: 1px solid black; padding: 2px;">RD</span>	
	↑ Warfarin and Superwarfarins Toxicity Salicylates Toxicity