Sex Kills

### Prompt:  
  
"I have a 66-year-old male patient who presented to the emergency department after experiencing what appeared to be an absence seizure while playing cards with his daughter. His medical history is significant for acid reflux, for which he is on antacids. Initially, he complained of headaches and has a swollen right testicle. Although his initial tests, including a CT scan and routine blood work, were normal, he is now exhibiting severe vomiting of blood.   
  
On physical examination, the patient appears well-nourished but is increasingly anxious about his condition. His daughter has expressed concern as his symptoms seem to intensify quickly. The patient's testicle is notably enlarged, being almost twice the size of the other, and further questioning revealed he has not been sexually active since his divorce a year prior, although he recently met his ex-wife at a cheese tasting and had unprotected intercourse.  
  
Given these symptoms and the complexity of the case, what potential diagnoses should be considered, and what immediate next steps in diagnostic testing would you recommend to evaluate the patient's condition before it progresses to further complications?"  
  
### Expected LLM Response:  
  
"In this scenario, the patient's symptoms of an absence seizure, a swollen testicle, and severe gastrointestinal bleeding suggest an underlying infectious or systemic process, possibly linked to a recent sexual encounter. Here are some differential diagnoses and recommended investigations:  
  
Differential Diagnoses:  
  
1. \*\*Brucellosis\*\*: Given the patient's consumption of unpasteurized cheese during the tasting event and his gastrointestinal and neurological symptoms, brucellosis—a zoonotic infection typically contracted through contaminated dairy products—should be considered. This infection can lead to multi-system involvement resulting in cardiac and neurological manifestations.  
   
2. \*\*Testicular Torsion or Orchitis\*\*: Although the history points towards an infectious etiology, torsion should also be considered given the acute swelling of the testicle. Infectious causes of orchitis, such as mumps or sexually transmitted infections, could also be relevant.  
  
3. \*\*Gonorrhea\*\*: The patient's history of recent sexual activity raises the suspicion of a sexually transmitted infection, specifically gonorrhea, which could cause complications, including disseminated gonococcal infection leading to septic arthritis or meningitis.  
  
4. \*\*Lymphoma or other malignancies\*\*: With a significant testicular enlargement and gastrointestinal bleeding, a hematological malignancy could be a possibility, particularly out of concern for an unusual presentation.  
  
Recommended Diagnostic Tests:  
  
1. \*\*Serological Testing for Brucellosis\*\*: Given the history of unpasteurized dairy consumption, serologic tests for brucellosis would be crucial.  
  
2. \*\*Ultrasound of the Scrotum\*\*: This imaging technique is essential for assessing the possibility of testicular torsion or evaluating for inflammation/infection (epididymitis/orchitis).  
  
3. \*\*Complete Blood Count and Liver Function Tests\*\*: These tests would provide information on potential hemolysis, metabolic derangements, and overall inflammatory status.  
  
4. \*\*Culture and Sensitivity Testing\*\*: Consider obtaining cultures for gonorrhea and chlamydia, especially considering the acute presentation of gastrointestinal symptoms which can indicate disseminated infection.  
  
5. \*\*CT Scan of the Abdomen and Pelvis\*\*: If brucellosis or malignancy is suspected based on initial test results, a more comprehensive imaging study could help identify other possible organ involvement.  
  
In conclusion, brucellosis remains a significant consideration in this case due to the patient's alimentary history and systemic symptoms, alongside the possibilities for other infections or malignancies. Early identification and treatment are essential to avoid complications such as cardiac issues or septic shock."  
  
### DISEASE:  
Brucellosis