

What caused the splenic infarct? A Rare Case of Babesiosis

Alejandra Perez-Chapman DO¹, Vidya Bollavaram MD¹, Vyshnavi Kodali DO¹, Juan Montoya MD²
Department of Internal Medicine, Geisinger Medical Center, PA

Background

- Babesiosis is a multi-system tick borne illness caused by a malaria-like intraerythrocytic protozoan
- It is endemic to the northern Mid-Atlantic United States
- Commonly presents with non-specific symptoms such as fever, myalgia, arthralgias
- Fever present in (88-90%) of patients

Case Description

- A 67-year-old F, presents with 2 weeks of exertional dyspnea and left-sided abdominal pain
- Vitals: Afebrile
- Labs: Hgb 8.1 g/dl, LDH 567, haptoglobin <10, reticulocyte count 3.2%
- CT Abdomen/Pelvis: Hepatosplenomegaly, a wedge-shaped splenic infarct, and lymphadenopathy around the porta hepatis
- Differentials: Hemolytic anemia, lymphoma, tick-borne illness, and antiphospholipid syndrome

Investigations & Treatment

- Blood smear showed no evidence of hemagglutination or schistocytes
- Flow cytometry was negative for lymphoma and leukemia
- aPTT mixing study was normal
- TTE showed no evidence of thrombosis or vegetation
- Tick borne panel was positive for both Babesia and Lyme
- ❑ Started doxycycline, azithromycin, and atovaquone
- ❑ Evidence of recovery by quick improvement of symptoms, stable hemoglobin, and decrease LDH

Discussion

- Common etiologies of splenic infarcts:
 - Thromboembolic disorders
 - Hematologic malignancies
 - Hypercoagulable states
 - Blunt abdominal trauma
 - Pancreatic Disorders
- Rare etiologies include Babesiosis
- Proposed mechanism: direct parasite invasion leading to endothelial damage, formation of microthrombi causing localized necrosis and hypoperfusion of splenic tissue
- Babesiosis has wide range of presentations and fever is absent in 10% of cases
- Does not require anticoagulation in the setting of Babesiosis

Outcome

- One month following treatment, Hgb returned to 12.2 g/dL and LDH improved to 242

Conclusion

Clinicians should be suspicious for Babesiosis as a differential for splenic infarcts in the setting of hepatosplenomegaly as it influences management.

