

## Severe Babesiosis

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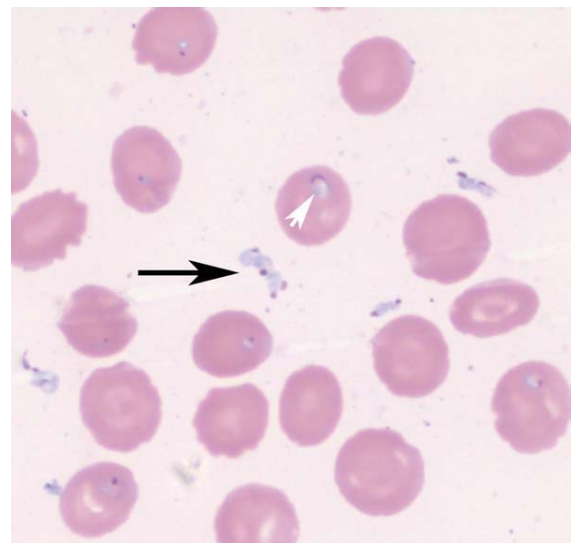
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An 85-year-old male from rural southern New Jersey with history of innumerable tick bites over many years was admitted for fever of unknown origin. On hospital day 2, his hemoglobin dropped from 11.3 g/dL to 7.5 g/dL, with an associated elevated indirect bilirubin and lactate dehydrogenase. Blood smear showed numerous intracellular and extracellular trophozoites, with approximately 10% to 30% of red cells infected, consistent with severe babesiosis. Given his high parasitemia, new hypoxia, lethargy, and advanced age, treatment was initiated with intravenous antibiotics and red cell exchange transfusion.

Babesiosis should be considered on the differential diagnosis of hemolytic anemia in patients that live in or have traveled to endemic areas, especially with history of tick bites. The most common appearance on blood smear is round to oval rings with pale blue cytoplasm and a red-staining nucleus (Fig. 1). Exoerythrocytic parasites or the pathognomonic “Maltese Cross” tetrad forms (not present in our patient’s smear) help to differentiate from falciparum malaria.

The patient’s parasite burden and clinical status markedly improved with treatment and he was discharged home.



**FIGURE 1.** Peripheral blood smear, with black arrow denoting an extraerythrocytic form; white arrow, an intraerythrocytic form.

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