Bartonella endocarditis in a child with tetralogy of Fallot complicated by PR3-ANCA positive serology, autoimmune hemolytic anemia, and acute kidney injury.

Authors: Manoj Parimi, MD, James Williams, BS, Jamie Sutherell, MD

Bartonella Henselae is a gram negative rod that is most commonly associated with cat scratch disease. A small study demonstrated that cats are a large Bartonella reservoir with up to 40% of cats demonstrating Bartonella seropositivity. Typical cases of cat scratch disease last 2–4 months and present with both fever and lymphadenopathy. However, there are numerous clinical presentations of Bartonella infection that have only recently been described. Bartonella henselae, an organism with a widening clinical disease spectrum, has been reported as the causative agent in a case of PR3-ANCA positive subacute bacterial endocarditis (SBE) with accompanying hypocomplementemia and acute kidney injury (AKI). Further, chronic generalized Bartonella infection has induced an autoimmune hemolytic anemia in at least one case. No cases have shown an association between Bartonella henselae in conjunction with both AKI and severe hemolytic anemia. To our knowledge, this is the first described case of Bartonella SBE in a child with underlying congenital heart disease with PR3-ANCA positivity complicated by both progressive glomerulonephritis and Coomb’s positive autoimmune hemolytic anemia. We are hopeful that cases such as this one will bring thought to the clinical diagnosis of endocarditis in patients who present with a variety of clinical manifestations.