

Pacemaker lead endocarditis associated with cryoglobulinemic Vasculitis: a complex case

Marrone E*¹, Cacciapuoti F², Abate A¹, Gallucci F¹, Magliocca A¹, Mastrobuoni C¹, Romano C¹, Saldamarco L¹, Valentino U¹ and Morella P¹

¹Internal Medicine Unit 3, Cardarelli Hospital, Naples, Italy

²Cardiology Unit, Monaldi Hospital, Naples, Italy

Background: Cryoglobulins are circulating immunoglobulin's that can precipitate in cold environments and cause Vasculitis. Although associated with hepatitis C infection in up to 90% of cases, cryoglobulinemia has been linked to many other infections, such as infective endocarditis (IE). We present a case of cryoglobulinemic Vasculitis observed in patient with cardiac device-related IE (CDRIE).

Case report: A 76-year-old woman, who received a permanent pacemaker implantation for a high-grade AV block in May 2021, was admitted to the hospital complaining dyspnea associated with anemia and a skin rash over her legs in December 2021. Her lab tests showed elevated inflammatory indices, kidney failure, negative Coombs test and an elevated immunoglobulin G (IgG) and M (IgM) cryoglobulins with hepatitis panel negative. Large

vegetation on the pacemaker lead was found on transthoracic echocardiogram and blood cultures were positive for coagulase-negative Staphylococcus. An appropriate antibiotic treatment of CDRIE associated with corticosteroid and a surgical intervention was planned. During hospitalization, the patient developed septic and thrombotic emboli in the right pulmonary artery, abscessed pneumonia and death.

Conclusions: Despite IE is an uncommon complication after initial pacemaker implantation; it is associated with high rates of morbidity and mortality. IE may present with various clinical situations, such as cryoglobulinemic Vasculitis and that a high index of suspicion and surgical intervention, in addition to aggressive antibiotic therapy may be necessary.