A Male with Chills and Arthralgias

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A 53-year old man presented to the ED with complaints of fevers and chills for 5 days. Two days prior, he started having generalized arthralgias and a painfully numb left index finger. Similar symptoms had also begun on his left great toe (See Figures D and E, Color Plates page 19). The patient denied recent trauma, although he was unsure if he had sustained an insect bite on the dorsal aspect of his left hand 8 hours prior to the onset of symptoms. Three sets of blood cultures obtained prior to admission were positive for methacillin-sensitive Staphylococcus aureus. The patient was treated with intravenous nafcillin and gentamicin. A transesophageal echocardiography was performed, which showed a friable and perforated left coronary cusp of the aortic valve, resulting in severe aortic insufficiency. The patient was scheduled for emergent aortic valve replacement. It was surmised that the initial site of infection was a badly ulcerated blister located on the patient's right great toe.

Discussion

There are numerous peripheral manifestations of bacterial endocarditis. The classic peripheral manifestations are found in up to half of the cases, but the prevalence has decreased in recent years. Janeway lesions are painless erythematous, hemorrhagic, or pustular lesions that are seen on the palms or soles and are often associated with acute bacterial endocarditis. Oslers nodes, which are tender, subcutaneous nodules often located on the pulp of the digits typically seen with subacute bacterial endocarditis. Other vasculitic complications include major arterial emboli, septic pulmonary infarcts, mycotic aneurym, conjunctival petechiae and intracerebral hemorrhages. Immunologic phenomena include glomerulonephritis, a positive rheumatoid factor, Roth spots and superficial retinal hemorrhages. These clinical findings are part of the minor criteria in the Duke classification of diagnosing bacterial endocarditis.

Frequently, the presentation of endocarditis is not clear and a high level of clinical suspicion is essential in a patient with fever and systemic symptoms suggestive of infective endocarditis.