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An Unusual Finding During a Diagnostic Heart Catheterization

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Clinical image description

A 73 year old man with a history of bradycardia with prior pacemaker implantation, mitral regurgitation with prior bioprosthetic mitral valve replacement, tricuspid valve repair, non-ischemic cardiomyopathy and recurrent pleural effusions was admitted from clinic due to worsening fatigue, abdominal distension, and leg swelling. Upon arrival, he was fluid overloaded on exam with markedly elevated B-type natriuretic peptide (3317 ng/dL). Acute decompensated heart failure was suspected and the patient was given intravenous furosemide.

An echocardiogram was performed which revealed a newly declined ejection fraction of 20-24%, decreased from 30-35% previously. Given his decline in systolic function, a left heart catheterization was pursued to evaluate for new coronary ischemia. The left heart catheterization revealed obstructive distal vessel disease which was not significant enough to explain his cardiomyopathy. During the heart catheterization, the patient was incidentally noted to have a heavily calcified spleen (Figure 1A). To further evaluate this, a CT of the abdomen & pelvis were performed which revealed diffuse, stippled calcifications throughout the spleen (Figure 1B).



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Splenic calcifications can be the result of a number of conditions including tumors, sickle cell disease, and hematogenous infections [4]. In this case, the diffuse nature of the calcifications implied a previously untreated fungal infection [1-4]. The patient was a 20 year resident of Ohio with no risk factors or concurrent symptoms for tuberculosis, brucellosis, or candidiasis and, therefore, a prior histoplasmosis infection was deemed most likely. Histoplasma capsulatum is a fungus that is endemic to the Ohio River Valley region and can infect humans through the inhalation of airborne spores [1-3]. Infections from Histo-

plasma capsulatum often go unnoticed and may not always require treatment; however, in the elderly and immunocompromised patients the infection can become more severe leading to differentiated histoplasmosis which can affect a range of organs including the liver and spleen, and in rare cases can even lead to death [1-4]. In this case, the patient's presentation was well explained by decompensated heart failure and his diffusely calcified spleen was likely an incidental finding. After adjustment of his medical therapy and further diuresis, the patient was discharged in stable condition.

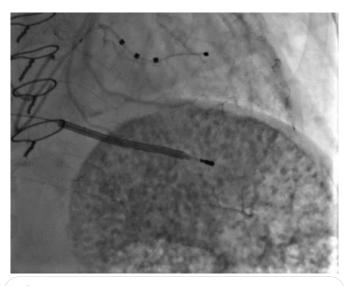


Figure 1A

Figure 1B

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