"Rheumatoid armor": a case of constrictive pericarditis

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Introduction: Rheumatoid arthritis can cause a variety of cardiac manifestations. Pericarditis can be found in about 30% of the patients, however it is usually acute and asymptomatic.[1] Constrictive pericarditis is a rare complication of rheumatoid arthritis with major complications.[2]

Case report: We present a case of a 70-year-old woman who presented to the emergency room with signs and symptoms of right ventricular heart failure. The patient has a 30-year-old history of seropositive rheumatoid arthritis and is currently treated with steroids and ebetrexat. Also, cardiac workup was performed a few years prior due to microvoltage in the ECG, however other than lamellar pericardial effusion with no effects on hemodynamics, no pathology was found. Initial workup showed right sided pleural effusion and cranial redistribution on chest X-ray, elevated natriuretic peptide level, as well as slightly elevated bilirubin and liver enzymes. A small amount of ascites was noted on the abdominal ultrasound. A circumferential 8-millimeter pericardial effusion, lower lateral e' wave velocity than septal e' wave velocity and a dilated vena cava were noted on the echocardiogram. Right heart catheterization showed possible signs of constriction. Treatment with non-steroid antirheumatics was initiated and prior corticosteroid therapy was escalated, however the patients' symptoms worsened, and the effusion progressed. Further magnetic resonance imaging revealed a thickened pericardium with post-contrast imbibition and septal bounce in early diastole, findings suggestive of constrictive pericarditis. Patient was referred to cardiac surgeons and radical pericardiectomy was performed with a good outcome.

Conclusion: Constrictive pericarditis is a rare and easily overlooked diagnosis that should be kept in mind when assessing rheumatological patients with signs of right-sided heart failure.

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LITERATURE

1. Mellana WM, Aronow WS, Palaniswamy C, Khera S. Rheumatoid arthritis: cardiovascular manifestations, pathogenesis, and therapy. Curr Pharm Des. 2012;18(11):1450-6. https://doi.org/10.2174/138161212799504795
2. Thould AK. Constrictive pericarditis in rheumatoid arthritis. Ann Rheum Dis. 1986 Feb;45(2):89-94. https://doi.org/10.1136/ard.45.2.89