Pericardial Manifestations in Autoimmune Encounters: Some Worthy Facts for Consideration!

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Letters to Editor

DEAR EDITOR,

We read with great pleasure the manuscript by Ashrafi *et al*. published in a recent issue of the International Journal of Preventive Medicine.[1] Their case highlights a very interesting association between celiac disease and pericardial manifestations. However, authors have not discussed the underlying mechanism for its causal association and treatment considerations for refractory cases.

Pericarditis has previously been reported in celiac disease, and it may even manifest as a primary presenting feature.[2] The likely mechanism is a disturbed humoral and cell-mediated immunity including other autoimmune reactions. There is deposition of circulating immune complexes originating from the small intestine, which may resemble the etiology of pericarditis similar to the one encountered in serum sickness.[2] The mechanisms are likely related to pericardial deposition of soluble antigen-antibody complexes when there is excess of antigen. It may often be difficult to differentiate the pericardial syndromes encountered in inflammatory bowel disease than those with celiac disease as the clinical picture is often similar. However, the response to gluten free diet often makes the etiological association very convincing.[2] Gluten free diet thus not only serves a diagnostic clinical marker, but also an effective treatment modality for this syndrome.[2]

We also want to highlight that celiac disease may be associated with several autoimmune conditions such as hypothyroidism, adrenal sufficiency, or polyglandular endocrine insufficiency syndromes etc., which can in fact independently contribute to the underlying etiopathogenesis of generalized serositis including pericardial effusion.[2] In our clinical experience, we have had encountered patients with polyglandular insufficiency who presented with pericardial effusion and even tamponade, in the setting of thyroid and adrenal deficiency. Thus, we recommend that clinicians should be vigilant about their coexistence and an appropriate screening for these conditions should be sought under appropriate clinical settings for example if patients have not responded to the standard treatment therapy of celiac disease. Authors have commendably excluded hypothyroidism in the presented case. This differential consideration is important for the above-mentioned reasons. After appropriately excluding other autoimmune conditions, if pericardial symptoms of celiac disease patients do not completely respond to gluten free diet alone, then steroids should be considered as a

first-line therapy.[3] It is in contrast to the treatment of acute idiopathic pericarditis where one would consider either nonsteroidal antiinflammatory drugs or colchicine.[3] Colchicine has not been extensively studied in patients with autoimmune diseases; however at least 7% of the patients in CORP-2 trial had underlying autoimmune conditions and benefited from the use of colchicine.[4] Thus, addition of colchicine to steroids therapy may be considered in such patients though extensive prospective data to support this recommendation is lacking.

Clinicians should be aware of these indications in order to make an appropriate informed decision and selection of treatment therapy.

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