

A Case Report of Acute Myocardial Infarction Compounding Active Ulcerative Colitis

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Abstract

A chronic inflammatory condition that primarily affects the gastrointestinal (GI) tract, ulcerative colitis (UC) can also affect extraintestinal organs such the skin and musculoskeletal system. Pericarditis and myocarditis are the two cardiac symptoms of UC that occur most frequently. Patients have a higher risk of developing venous thromboembolic problems and mesenteric ischemia, although it's unclear whether these conditions are related to ischemic heart disease and myocardial infarction. We describe the case of a 27-year-old man who had an acute myocardial infarction and had elevated factor VIII activity in addition to ulcerative colitis and anti-PRIII ANCA positivity. We talk about potential causal connections between these clinical diseases and show how cardiac magnetic resonance (CMR) can help patients with underlying inflammatory conditions who have chest discomfort and myocardial injury.

Discussion

Chronic relapsing and remitting inflammatory ulcerative colitis affects the colonic mucosa and is frequently accompanied by extraintestinal symptoms in the skin, liver, eyes, kidneys, and joints. The two most frequent cardiovascular symptoms of UC are myocarditis and myopericarditis, while it is still unclear how common these conditions are overall in people with IBD. Dilated cardiomyopathy, endomyocardial fibrosis, and heart amyloidosis have also been documented [1]. A Finnish epidemiological study that discovered a significantly higher prevalence of coronary artery disease among men and women with IBD compared to age- and sex-matched healthy controls first raised the possibility of a link between ischemic heart disease (IHD) and inflammatory bowel disease (IBD) [2]. A recently published retrospective study that evaluated the risk of arterial thrombosis in 17,487 IBD patients and 69,948 controls found no overall increased prevalence of MI in IBD patients, despite the fact that there have been few reports of MI in patients with UC in the literature [3, 4].

However, a subgroup analysis of the study's populations revealed that women over 40 with IBD had a greater risk of MI (equal risks for UC and CD, hazard ratio (HR), 1.6, P = 0.003). Because of the above-mentioned study's failure to account for established CHD risk factors and lack of information on whether MI was significantly atherogenic or not, its results should be regarded with caution [5].

Conclusions :

We report a case of myocardial infarction in a patient with UC and enteropathic arthritis who had anti-PRIII antibodies and coagulation cascade activation as signs of vascular inflammation (increased factor VIII activity). The most common cardiac symptom in young patients with underlying IBD is myopericarditis. But they might also exhibit a higher thrombotic/inflammatory burden, which can lead to MIs that are either atherogenic or nonatherogenic. Thus, it is advised to have a high index of clinical suspicion and a low threshold for early imaging in patients who come with chest discomfort and myocardial injury.

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