

## Mesalazine-Induced Myopericarditis in a Professional Athlete

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**Abstract :** Myopericarditis is an inflammation syndrome characterised by clinical diagnostic criteria for pericarditis, such as chest pain, combined with evidence of myocardial involvement, such as elevation of biomarkers of myocardial damage, e.g., troponins. It can rarely be a complication of therapeutics used for dysregulated immune-mediated diseases such as inflammatory bowel disease (IBD), for example, mesalazine. The infrequency of mesalazine-induced myopericarditis adds to the challenge in its recognition. Rapid diagnosis and the early introduction of treatment are crucial. This case report follows a 24-year-old professional footballer with a past medical history of ulcerative colitis, recently started on mesalazine for disease control. Three weeks after mesalazine was initiated, he was admitted with fever, shortness of breath, and chest pain worse whilst supine and on deep inspiration, as well as elevated venous blood cardiac troponin T level (cTnT, 288ng/L; normal: <13ng/L). Myocarditis was confirmed on initial inpatient cardiac MRI, revealing the presence of florid myocarditis with preserved left ventricular systolic function and an ejection fraction of 67%. This was a longitudinal case study following the progress of a single individual with myopericarditis over four acute hospital admissions over nine weeks, with admissions ranging from two to five days. Parameters examined included clinical signs and symptoms, serum troponin, transthoracic echocardiogram, and cardiac MRI. Serial measurements of cardiac function, including cardiac MRI and transthoracic echocardiogram, showed progressive deterioration of cardiac function whilst mesalazine was continued. Prior to cessation of mesalazine, transthoracic echocardiography revealed a small global pericardial effusion of < 1cm and worsening left ventricular systolic function with an ejection fraction of 45%. After recognition of mesalazine as a potential cause and consequent cessation of the drug, symptoms resolved, with cardiac MRI performed as an outpatient showing resolution of myocardial oedema. The patient plans to make a return to competitive sport. Patients suffering from myopericarditis are advised to refrain from competitive sport for at least six months in order to reduce the risk of cardiac remodelling and sudden cardiac death. Additional considerations must be taken in individuals for whom competitive sport is an essential component of their livelihood, such as professional athletes. Myopericarditis is an uncommon, however potentially serious medical condition with a wide variety of aetiologies, including viral, autoimmune, and drug-related causes. Management is mainly supportive and relies on prompt recognition and removal of the aetiological process. Mesalazine-induced myopericarditis is a rare condition; as such increasing awareness of mesalazine as a precipitant of myopericarditis is vital for optimising the management of these patients.

**Keywords :** myopericarditis, mesalazine, inflammatory bowel disease, professional athlete

**Conference Title :** ICCMCR 2021 : International Conference on Clinical and Medical Case Reports

**Conference Location :** London, United Kingdom

**Conference Dates :** December 09-10, 2021