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Abstract:

Hydroxychloroquine leading to a broken heart: Case Series

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Background:

Hydroxychloroquine (HCQ) has been used to treat many diseases including rheumatic diseases, malaria, and over recent years, as a possible antiviral in the setting of coronavirus disease 2019. Although this drug has shown clinical benefit in many diseases, long term use of this drug can have side effects not well studied. This case report is on Hydroxychloroquine and its side effects after long term use of the drug, specifically focused on Cardiomyopathy and development of heart failure in a patient with no prior history of cardiac disease. This case report focuses on the patients Hydroxychloroquine use, progression of symptoms, and diagnosis of Hydroxychloroquine induced cardiomyopathy and heart failure.

Case:

A 67 year-old female with Systemic Lupus Erythematous and Rheumatoid Arthritis on long term HCQ presented with shortness of breath and dyspnea on exertion found to have severe cardiomyopathy with decreased ejection fraction of 29% with no significant vascular pathology. Decision-making: Given negative imaging and laboratory testing for the cause of this new onset heart failure and cardiomyopathy, endomyocardial biopsy was performed and sent out for electron microscopy and interpreted showing multiple thick sections of myelinoid bodies and ultrastructural features consistent with hydroxychloroquine cardiotoxicity.

Conclusion:

Long-term administration of Hydroxychloroquine is correlated with cardiotoxic specific myocardial pathologic findings that are verified by endomyocardial biopsy. Earlier detection and diagnosis along with stopping of hydroxychloroquine may lead to better outcomes.