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## From muscles to misery: The hidden danger of anabolic steroids on cardiac health- a compelling case study

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We present a case of anabolic steroid/testosterone-induced cardiomyopathy in a 31-year-old male who was admitted to our tertiary hospital with hemoptysis, atrial fibrillation (AF), new-onset left-sided heart failure, and cardiogenic pulmonary edema. The patient, a successful bodybuilder, had been using testosterone 500 mg weekly as part of his regimen but increased his dose to 1000 mg weekly three weeks prior to presentation. Prior to admission, he had normal ECGs and no cardiac abnormalities. On admission, the patient exhibited atrial flutter with rapid ventricular response, jugular venous distension, and a grade II/VI apical systolic murmur. He required intubation and mechanical ventilation due to acute respiratory distress. Imaging studies revealed interstitial pulmonary edema and moderate mitral regurgitation. Further evaluations showed severely reduced left ventricular ejection fraction, biatrial enlargement, and absence of thrombus. Cardioversion and pharmacologic therapy were initiated to maintain sinus rhythm. Investigations ruled out secondary causes of cardiomyopathy, and the patient's medication regimen included angiotensin-converting enzyme inhibitors,  $\beta$ -blockers, and aldosterone antagonists. He was subsequently extubated and planned for cardiac MRI and serial echocardiograms. Anabolic steroid-induced cardiomyopathy is a recognized but uncommon condition associated with the misuse of androgenic-anabolic steroids. This case highlights the potential cardiovascular complications of steroid abuse, particularly in athletes and bodybuilders. It emphasizes the importance of recognizing and monitoring cardiac function in individuals using anabolic steroids and the need for patient education regarding the potential risks. Further research is needed to better understand the mechanisms and long-term outcomes of this condition.



Figure 1: Cardiac MRI showing Dilated Cardiomyopathy

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### Biography

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