

Mitral Annular Disjunction: a case report

Heloísa Macedo de Araújo Matias da Costa¹, Pedro Lessa Moraes Dantas dos Santos¹, Sylton Arruda de Melo^{2,*}

Introduction: Mitral Annular Disjunction (MAD) is a structural anomaly characterized by the separation of the mitral annulus from the left ventricular wall, most commonly in the posterolateral portion. This displacement compromises the normal anchoring of the annulus to the myocardium, leading to excessive mitral valve motion during systole, which may result in valvular prolapse, Mitral Regurgitation (MR), chronic volume overload, ventricular arrhythmias, and cardiac dysfunction. **Case Description:** JRAF, a 30-year-old male patient, a businessman from Caicó (Rio Grande do Norte, Brazil) reported arrhythmic tachycardic palpitations since the age of 20. At that time, echocardiography, Holter monitoring, and treadmill test were normal. He was using venlafaxine for depression. In 2019, a treadmill test showed ST-segment depression (up to 1.9 mm) in CM5, V6, and the inferior wall. Stress and rest myocardial scintigraphy were normal. In 2024, the patient returned with new complaints regarding palpitations. Two Holter monitor recordings showed no abnormalities, even during symptomatic episodes. He had discontinued antidepressant therapy on his own. Cardiac magnetic resonance imaging demonstrated mitral annular disjunction measuring 3.3 mm, associated with mild mitral valve prolapse and preserved ventricular function. He was informed about the benign nature of the finding and advised to restart antidepressant treatment. **Conclusion:** This case highlights MAD as a structural anomaly that is frequently underdiagnosed but, when mild, does not increase the risk of severe ventricular arrhythmias. The patient presented with persistent palpitations associated with anxiety disorders, resulting in multiple cardiological investigations over the years. Cardiac magnetic resonance imaging confirmed mild MAD without significant hemodynamic impact. This case reinforces the importance of a careful clinical approach, avoiding unnecessary diagnostic tests and consequent iatrogenic anxiety, particularly in individuals with preexisting psychiatric disorders.

1. Universidade Potiguar – Natal (RN), Brazil

2. Hospital do Coração de Natal – Natal (RN), Brazil.

*Correspondence author: samelo@cardiol.br

