Mitral annular disjunction – implications on everyday clinical practice – wait and see or something else?

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Mitral annular disjunction (MAD) is a displacement of the mitral valve leaflet onto the left atrial wall, and it can be found in patients with mitral valve prolapse (MVP). The risk of malignant arrhythmias and sudden cardiac death (SCD) is generally low, and therefore MVP by itself is not routinely considered as a major cause of SCD. For decades, MAD has been associated with a risk of malignant ventricular arrhythmias and SCD, therefore recognition and risk stratification are highly important. Although this entity can be potentially fatal there are no strict guidelines how to treat and follow up these patients. In general, patients who have severe mitral regurgitation can benefit from mitral valve replacement but at the most risk are does who are diagnosed with MVP and MAD, but are oligosymptomatic and, according to current guidelines, have no indication for mitral valve surgery, intracardial defibrillator implantation or even medical treatment. In every day clinical practice, we often encounter young patients, with chest pain and palpitations, mitral valve prolapse, or even without prolapse, and echocardiographic indications of MAD. Detection of MAD by echocardiography is generally evaluated with a single plane image, which can often overlook disjunction. It is important to highlight the usage of multiple imaging techniques to diagnose MAD and complementary value of transesophageal echocardiography and cardiovascular magnetic resonance imaging, given limited clinical knowledge and the lack of a standard imaging technique for MAD diagnosis. But even when we diagnose MAD, there are still no guidelines how to treat these patients.[1-3] We present series of patients with detected MAD and different clinical scenarios, indicating the need for stricter guidelines.

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LITERATURE

1. Wu S, Siegel RJ. Mitral annular disjunction: A case series and review of the literature. Front Cardiovasc Med. 2022 Aug 12;9:976066. https://doi.org/10.3389/fcvm.2022.976066
2. Souza AC, Carvalho MVSF, Sales MA, Bezerra SL, Torreão JA, Macêdo CT. Mitral Annulus Disjunction: Diagnostic Modalities, Clinical Implications, and Prognostic Progression. Arq Bras Cardiol: Imagem cardiovasc. 2022;35(3):eabc300. https://doi.org/10.47593/2675-312X/20223503eabc300
3. Dejgaard LA, Skjølsvik ET, Lie ØH, Ribe M, Stokke MK, Hegbom F, et al. The Mitral Annulus Disjunction Arrhythmic Syndrome. J Am Coll Cardiol. 2018 Oct 2;72(14):1600-1609. https://doi.org/10.1016/j.jacc.2018.07.070