

Cardioneuroablation -Radiofrequency treatment for functional bradycardia

Ricardo Ferreira Silva¹, Rafael Flores Pires¹, Daniel Pereira da Silva Cavalieri¹, David Costa Britto Neto¹, Fernando Monteiro de Aguiar Giordano¹, Sandra Eneida de Pina Castelo¹

1. Hospital Samaritano Paulista – São Paulo (SP), Brazil

For a long time, the correction of cases of bradycardia, once secondary causes had been ruled out, was only achieved by implanting a permanent pacemaker. This therapy often prevents syncope but does not always eliminate symptoms related to the abrupt drop in heart rate. In recent years, thanks to the contribution of Pachon et al., radiofrequency treatment at the site of concentration of parasympathetic ganglia in the heart has improved all symptoms of functional bradycardia without the need for pacemaker implantation. The following case refers to a young patient, 30 years old, after bariatric surgery with a reduction of 28 kg. During medical evaluation, she did not present any metabolic changes, but with a chronotropic deficit on 24-hour Holter monitoring. Due to the syncope was decided to perform the Tilt Test, which demonstrated an important sinus pause, characterizing cardioinhibitory syncope. The patient was initially referred for pacemaker implantation, but due to the characteristics of the condition, we suggested cardioneuroablation. During the procedure, we performed ablation of the main parasympathetic ganglia in the left and right atrium, with an increase in sinus frequency and a change in the Wenckback point. In the end, the atropine test demonstrated satisfactory vagal denervation. The patient remains asymptomatic, with no new episodes of syncope and no complaints of low output.