

Dextrocardia in a Patient Requiring Permanent Pacemaker Implantation: A Case Report

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Introduction

Dextrocardia is a rare congenital anomaly characterized by the positioning of the heart in the right hemithorax. It's prevalence is in about 01 in 12.000 patients [1]. It is generally identified incidentally on imaging examinations and may be associated with other anatomical abnormalities or occur in isolation. The majority of the cases are asymptomatic [2]. We report a case of isolated dextrocardia diagnosed during permanent pacemaker implantation, illustrating the technical and diagnostic challenges of this uncommon condition.

Case Description

An 84-year-old male patient with controlled chronic comorbidities sought medical care due to malaise and progressive asthenia. Physical examination revealed bradycardia. He was referred for hospital evaluation, and laboratory tests showed mild renal dysfunction and electrolyte disturbances. The electrocardiogram showed a second-degree atrioventricular block, type 2:1 (Figure 1).

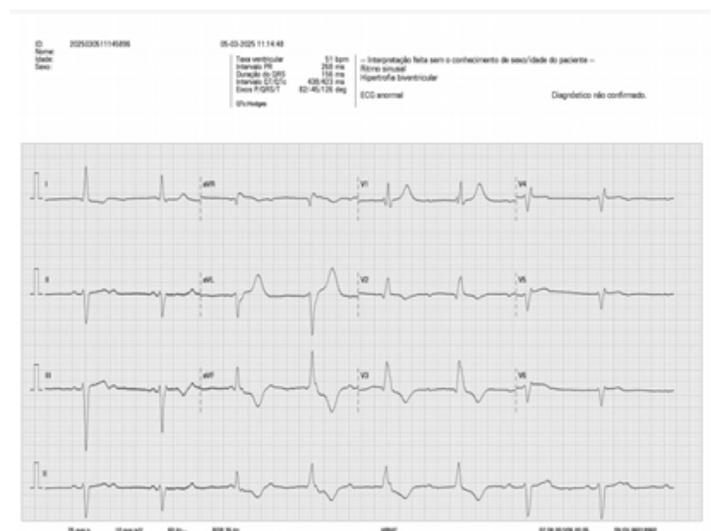


Figure 1: Electrocardiogram.

The patient was using a beta-blocker, which was discontinued, followed by clinical reassessment after 48 hours. Given the persistence of the conduction disorder and correction of electrolyte imbalances, permanent pacemaker implantation was indicated. The patient was referred to a specialized center and underwent the procedure. During intraoperative fluoroscopy, dextrocardia was observed (Figure 2) and subsequently confirmed by transthoracic echocardiography. Pacemaker implantation was successfully performed without complications. The patient showed favorable clinical evolution and was discharged 48 hours after the procedure.

Conclusion

This case reinforces the importance of thorough anatomical evaluation in invasive procedures such as pacemaker implantation, particularly in the absence of a prior diagnosis of cardiac anomalies. Intraoperative identification of dextrocardia required technical adaptation, highlighting the need for adequate preparation and versatility of the medical team. Early recognition of anatomical variations is essential for safe and effective procedural management, contributing to improved clinical outcomes.

References

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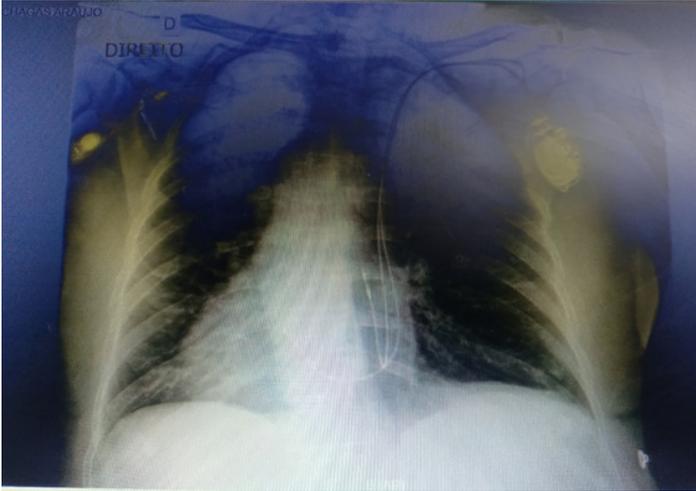


Figure 2: Chest x-ray.