

Probable atrioventricular reentry tachycardia (Node to Node) in a patient with right atrial isomerism in the immediate postoperative period of palliative surgery

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Introduction: Patients with right atrial isomerism present duplicity of intracardiac structures, such as atrioventricular nodes. They thus present tachycardia of supraventricular reentry and responsive to adenosine therapy. In the postoperative period of palliative surgeries, the presence of tachycardia in these patients is not always related to junctional ectopic foci.

Objective: To describe a case of a patient with right atrial isomerism associated with complex heart disease with tachycardia maintained by AV reentry due to probable accessory AVN. **Case report:** 6-year-old girl with right atrial isomerism, total AV septal defect with vessels in transposition and anomalous intracardiac pulmonary vein drainage corrected at six months of age. She underwent central shunt replacement at 6 years of age. She has pulmonary hypertension, which requires palliative surgical support. After replacing the central shunt in the immediate postoperative period, she presented tachycardia with narrow QRS complexes and PR greater than RP with QRS onset at the beginning of the P wave of 120 ms and HR 188bpm. She had a BP of 65x40 mmHg and a capillary refill time of 5 seconds. Following ECG analysis and the 2020 PALS algorithm, adenosine was performed with immediate reversion to sinus rhythm and recovery of hemodynamic patterns. **Conclusion:** 1) Although tachycardias due to AV reentry are rarer in patients with right atrial isomerism due to Node to Node reentry, they should always be considered; 2) The use of adenosine in hemodynamically unstable supraventricular tachycardias should be the first choice when available; 3) electrocardiographic recording of the crisis allows for a more assertive diagnosis and more effective short- and long-term treatment.