Image in cardiology

Repetitive Ventriculoatrial Block During Nodal Reentrant Tachycardia



Bloqueo ventriculoauricular repetitivo durante una taquicardia por reentrada intranodular

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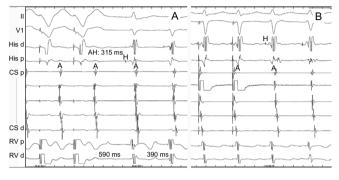


Figure 1. Figure 2.

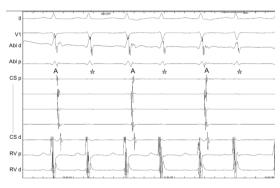


Figure 3.

Recurrence of atrioventricular block (AVB) during common atrioventricular nodal reentry tachycardia is a rare event indicating that a large part of the atrium does not participate in the reentry circuit and that a final common superior circuit is probably present. We present the case of a 64-year-old woman who was referred for electrophysiological study due to episodes of palpitations with precordial tachycardia. During induction with atrial pacing (350 m cycle), the appearance of Wenckebach type AVB was repeatedly observed with sustained tachycardia (Figure 1; CS, coronary sinus; D, distal; H, His; P, proximal; RV, right ventricular; *, AVB). The short atrioventricular interval and occasional absence of signal in the atrial leads ruled out the presence of an accessory pathway. Channeling of the tachycardia with ventricular pulses ruled out atrial tachycardia and enabled a corrected return cycle of 200 ms to be calculated. This also supported the diagnosis of atrioventricular nodal reentry tachycardia (Figure 2A). Finally, an atrial-His-atrial response after channeling with atrial pulses ruled out ectopic atrioventricular junctional tachycardia (Figure 2B).

It should be recognized that the spontaneous and frequent appearance of AVB (Figure 3; Abl, ablation in area of slow conduction; A, atrial signal; *, AVB) limited the capacity for this phenomenon to predict the risk of iatrogenic atrioventricular node lesion during radiofrequency application. Nevertheless, noninducible tachycardia was achieved following the procedure with no complications.

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