Case Report

The patient was a 39-year-old female with recurrent paroxysmal, regular narrow QRS complex tachycardia. The patient had signed informed consent before the baseline electrophysiology study and patient was investigated in the fasting state without sedation. All anti-arrhythmic drugs were discontinued for at least five half-life periods. Surface electrocardiography (ECG) and endocardial electrocardiograms were recorded on a multichannel recording system (Pruka Cardiolab, GE HealthCare, Milwaukee, WI, USA). Two 6 F diagnostic quadripolar catheters were inserted percutaneously via the right femoral vein and positioned in the high right atrium, His-bundle region. A 6 F decapolar catheter was inserted via right femoral vein and placed inside the coronary sinus. A standard electrophysiology study was performed. Baseline surface electrocardiogram was normal and intracardiac intervals revealed an HV interval of 44 ms after programmed atrial stimulus. The tachycardia cycle length was 260 ms, and earliest retrograde atrial activation at the His bundle catheter. AVNRT was induced and diagnosed on the basis of standard diagnostic criteria. Dual AV nodal physiology was determined by a sudden AH or HA jump of at least 50 ms in response to programmed atrial or ventricular extra stimulation or demonstration of dual AV node physiology with earliest retrograde atrial activation at the His bundle catheter. AVNRT was induced and diagnosed on the basis of standard diagnostic criteria. Dual AV nodal physiology was determined by a sudden AH or HA jump of at least 50 ms in response to programmed atrial or ventricular extra stimulation or demonstration of dual AV node physiology with earliest retrograde atrial activation at the His bundle catheter. AVNRT was induced and diagnosed on the basis of standard diagnostic criteria. 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Key Words:
AVNRT, Cryoablation, Junctional Beat.
catheter movement is difficult since the catheter is freezing, the junctional beats can not be attributed to the mechanical effect of catheter movement. Taken together, in our view, the junctional beats in our case likely did not stem from mechanical effect of the His catheter.

We believe this is the first report of junctional beats occurring during cryo-ablation of AVNRT. The accelerated junctional tachycardia was seen on re-warming in during cryo-ablation.\(^1,2\) Nguyen et al. reported transient accelerated junctional rhythm late after para-Hisian accessory pathway cryo-ablation.\(^2\) Recently, Drago et al. have reported in the post ablative period, junctional arrhythmias occurred in 2 patients, and they claimed that probably it was due to a direct trauma or inflammatory reaction very close to the compact AV node.\(^2\) In our case we demonstrated that junctional beats can be observed during cryo-ablation. The implication and pathophysiologic mechanism of this event need to be clarified in further studies.

References