The electrophysiologic characteristics in patients with only ventricular-pacing inducible slow-fast form atrioventricular nodal reentrant tachycardia.

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摘要

Abstract

Background: Atrioventricular nodal reentrant tachycardia (AVNRT) can be usually induced by atrial pacing or extrastimulation. However, it is less commonly induced only by ventricular pacing or extrastimulation. Objective:The purpose of this retrospective study was to investigate the electrophysiologic characteristics in patients with slow-fast form AVNRT that could be induced only by ventricular pacing or extrastimulation. Methods: The total population was 1497 patients associated with AVNRT. There were 1373 (91.7%) patients who had slow-fast form AVNRT included in our study. Group 1 (n = 45) could be induced only by ventricular pacing or extrastimulation, and Group 2 (n = 1328) could be induced by only atrial stimulation or both atrial and ventricular stimulation. The electrophysiologic characteristics of the group 1 and group 2 patients were compared. Results: Group 1 patients had a significantly lower incidence of both antegrade and retrograde dual AV nodal pathways. The pacing cycle length (CL) of the antegrade 1:1 fast pathway (FP) and antegrade ERP of the FP were both significantly shorter in Group 1 patients. Mean antegrade FRP of the fast and slow pathways were significantly shorter in Group 1 patients. The differences of pacing CL of 1:1 antegrade conduction, antegrade ERP and FRP were much longer in Group 2 patients. Conclusion: This study demonstrated the patients with slow-fast form AVNRT that could be induced only by ventricular stimulation had a lower incidence of dual AV nodal pathways and the different electrophysiologic characteristics (shorter pacing CL of the antegrade 1:1 FP, antegrade ERP of the FP and the differences of pacing CL of 1:1 antegrade conduction, antegrade ERP and FRP) from the other patients. The specific electrophysiologic characteristics in such patients could be the reason that could be induced only by ventricular stimulation..