

Classification of AVNRT: an unresolved entity.

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Abstract

The classification of AVNRT is based on HA and VA interval. Typical AVNRT is diagnosed in presence of HA ≥ 70 ms OR VA interval ≥ 60 ms and HA > 70 ms or VA > 60 ms is required to diagnose atypical AVNRT. This might be fallacious in some clinical situations. The septal VA and the “shortest” VA may be also different depending on clinical scenario .

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We read the paper of Olshausen et al.¹ on cryoablation in atypical AVNRT and would like to commend them for their effort on this topic. But, their classification system of AVNRT seems incongruous in the following aspects:

The classification of AVNRT into typical and atypical AVNRT as mentioned in their study is primarily based on HA ≥ 70 ms OR VA interval ≥ 60 ms^{1,2}; either of these is classified as typical AVNRT. Strangely either of these, viz. HA > 70 ms OR VA > 60 ms is classified as atypical AVNRT! This is completely fallacious.

1. Consider a common situation where the patient is having a normal HV of 40 ms at baseline and VA interval of 50 ms during AVNRT. Quite obviously the HA interval would be 90 ms during tachycardia. Which interval should be used to classify AVNRT as typical or atypical AVNRT in such a scenario? Did not the authors encounter such situations?

Considering the normal HV interval being 35-55 ms, should not the HA interval cut-off be @ 50ms higher than the VA interval cut-off?

2.The authors have not mentioned in which situation they used VA interval as a diagnostic criteria instead of HA and why?

3. In their study they have mentioned the “shortest” VA interval, as one of the criteria of AVNRT diagnosis. It would be interesting to know which is more important, shortest VA or septal VA (VA at the His region)? The shortest VA and septal VA may well be different, when the atrial activation is earliest near the ostium of the coronary sinus.

References:

1. Olshausen GV, Jemtrén A, Schwieler J, Tapanainen J, Bourke T, Nordin AP, Benson L, Saluveer O, Kennebäck G, Braunschweig F, Drca N; Cryoablation of atypical atrioventricular nodal reentry tachycardia; J Cardiovasc Electrophysiol. 2021;1-8
2. Katritsis DG, Josephson ME. Classification of electrophysiological types of atrioventricular nodal re-entrant tachycardia: a reappraisal. Europace. 2013;15:1231-1240.