

Ivabradine for the treatment of automatic atrial tachycardia

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INTRODUCTION

Ivabradine is a selective inhibitor of the pacemaker specific current funny. The use of this drug for the control of the heart rate in the adult population, particularly who doesn't tolerate beta blockers therapy, is known. There are, instead, a few scientific papers about using Ivabradine for treatment of automatic atrial tachycardia in pediatric patients.

METHODS

We present 5 cases of pediatric patients (age 1-168 months, media age 33,8) who were admitted to our clinic with automatic atrial tachycardia: 2 of them had junctional tachycardia.

At admission the mean heart rate of ectopic tachycardia was 160 bpm. No one had heart malformation and ejection fraction was depressed in only one patient with cardiomyopathy and muscular dystrophy.

All patients started beta blockers as first line treatment with poor control of heart rate so in 4 out of 5 patients we used association therapy with propafenone, amiodarone or digoxin with only mild control of heart rate.

RESULTS

We use Ivabradine at the dose 0,175 mg/Kg/days till 0,2 mg/Kg/days; in one patient as substitution of beta blocker and in the other in association with digoxin 2 pts, amiodarone and sotalolol 1 patient respectively. After introduction of Ivabradine in all we observed recovery of sinus rhythm stable in one patient while in the other remain episodes of ectopic tachycardia with a better control of heart rate. The mean heart rate after Ivabradine introduction was of 90-100 bpm. The mean follow up after introduction of Ivabradine was of 9 months (from 1 month till 30 months). We didn't observe acutely or during follow up any side effects.

CONCLUSIONS

In accordance to our experience, even if the number of patients treated is small, we can conclude that Ivabradine is useful for treatment of ectopic atrial-junctional automatic tachycardia not responsive to common therapy. It will be necessary to enlarge number of patients treated with Ivabradine to confirm the usefulness of this drug.