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**EFFECTS OF ATORVASTATIN APPLICATION ON ATRIAL HIGH RATE EPISODES IN DUAL-CHAMBER PACED PATIENTS WITH HYPERTENSION**

Wei Zixiu,<sup>1</sup> Zhang Mei,<sup>2</sup> Sun Xiaofei,<sup>1</sup> Ren Changjie,<sup>1</sup> Cong Peiling<sup>1</sup> <sup>1</sup>Jining First People's Hospital, Jining, China; <sup>2</sup>Qilu Hospital of Shandong University, Shandong, China

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**Objectives** To determine the effectiveness of atorvastatin treatment on reducing the occurrence of AHREs (atrial high rate episodes, recorded by pacemakers) in Sick sinus syndrome (SSS) patients with hypertension after dual-chamber pacemaker implantation.

**Methods** 49 SSS patients with hypertension and accepted treatment of dual-chamber pacemaker implantation were enrolled in this study and were divided into treatment and control groups for the follow-up of 12 months. Patients in the control group (n=25) were treated with standard therapy practices after dual-chamber pacemaker implantation while patients in the treatment group (n=24) took atorvastatin at a dosage of 20 mg/day combined with standard therapy practices until the end of the study. The levels of C-reactive protein were examined at baseline and after the follow-up. During the visits, the pacemaker memories were recorded. The frequency of AHREs (times/year, those that were longer than 5 min were recorded), the duration of the AHREs (h/year), the percentage of atrial pace-making (AP%) and the percentage of ventricular pace-making (VP%) were recorded. The SPSS 16.0 software package was used for statistical analysis.

**Results** (1) The times and duration of AHREs in the treatment group was significantly smaller than what was observed in the control group ( $p<0.05$ ). Comparisons of AP% and VP% between groups did not show significant difference. (2) At the end of follow-up, hsCRP levels in treatment group showed a marked decrease compared to those in the control group ( $p<0.05$ ). (3) HsCRP level during follow-up respectively correlated well with AHREs times and AHREs duration.

**Conclusions** (1) Atorvastatin can decrease the frequency and duration of AHREs after dual-chamber pacemaker implantation, it is possible that the mechanism may have a relationship to the anti-inflammatory actions of statins. (2) HsCRP levels during follow-up correlate well with occurrence of AHREs.