[gw22-e0492] **THE INFLUENCE FACTORS AND STRATEGIES OF RECONSTRUCTION TIMING OF PACING SYSTEM**

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Objective This study aimed to investigate what factors affect reconstruction timing of pacing system, and to explore how to optimise reconstruction timing of pacing system. The study will provide a new scientific basis for administration of patients with pacemaker therapy.

Methods The data of total 473 cases of 332 patients with pacemaker reimplantation from the First Affiliated Hospital of Kunming Medical College from January 1992 to October 2010 were continuously collected. All patients accepted a long time follow-up, including basic information, the causes and time of the first pacemaker implantation and pacemaker reimplantation, pacemaker parameters, surgical treatment measures and related program data. All these data were recorded in detail and analysed using statistical methods to do a systematic review.

Result (1) There were 287 cases in the planned reconstruction of pacing system group (60.7% of total reimplantation), there were 130 cases, (27.5%) in the group earlier than planned reconstruction of pacing system, and the total cases 56 cases, (11.8%) in the later reconstruction of pacing system group. The normal battery depletion was the first reason for the patients in the planned reconstruction of pacing system group; the complications and some factors of patients themselves were the most important reasons for the patient in the group earlier than planned reconstruction of pacing system; while poor economic conditions was the first reason for the patients of the later reconstruction of pacing system group. (2) Among three different reconstruction timing groups, 299 cases (63.2%) had reasonable timing for pacing system reconstruction; 174 cases (36.8%) had unreasonable timing for pacing system reconstruction. In the Unreasonable reconstruction timing group, there were 60 cases with complications, 37 cases of absence of attention, 29 cases with poor economic conditions; 26 cases of being traffic inconvenience, 13 cases of poor physical conditions, as well as nine cases due to medical sources factors.

Conclusion (1) The reasons of unreasonable reconstruction timing are: the complications, the patients of lack of emphasis on disease, poor economic conditions, traffic inconvenience, poor physical condition, and medical source factors (doctor based only on pacemaker manufacturer warranty period or the patients will to replace the pacemakers). (2) In order to avoid the unreasonable reconstruction timing, doctor must take effective measures to decide reasonable reconstruction timing, which can reduce unnecessary costs and complications caused by the unreasonable reconstruction pacing system, effectively improve the pacing system safety and extend longevity of pacing system, so that pacing system can better adapt to the patients with diseases. (3) Optimisation of pacing system reconstruction timing should be taken effectively. For example, optimise preoperative period process when the pacemaker was implanted for the first time. During pacing system reimplantation, doctor must maximally reduce risk optimising pacing system follow-up process and increasing knowledge of both doctors and patients about follow-up. It is also very important that advanced hardware and software of pacing system, as well as new technologies of follow-up should be also used by the doctors.