Effectiveness of ICD Implantation for Primary Prevention after AMI in Japan

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Background: In Japan, the guideline for ICD implantation has been established on the basis of large clinical trials in the western countries. In the trials, the prognosis of the control group has been worse than that in Japan. We need to seek domestic evidence about the applicants of ICD. Objective: For the post ICD implantation patients after AMI, we will study whether there are any differences in life-threatening arrhythmic events between in the primary and secondary prevention group. Method: At Osaka Police Hospital, from January 2000 to March 2010, 77 patients had been implanted into ICD or CRT-D based on OMI. Retrospectively ICD operating conditions were examined between the two groups. Results: In the primary group, event ratio was 28% and in the secondary group, 38.3%. There was no statistical difference between two groups. In the primary group, event history and LVEF were independent. In the secondary group, those were correlated, that is, LVEF for patients with event history was 29.2 ± 9.99%, while that without event history was 38.9 ± 13.8%. Conclusion: In one center and smaller number study, we have been able to demonstrate that implantation for primary prevention is also effective in Japan. Prediction based on LVEF was found to be effective only for patients for secondary prevention. Keywords: ICD, VF/VT