

Sex and pacemaker Placement

Sex and age predict long-term survival after pacemaker placement

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NEW YORK (Reuters Health) - German researchers have identified several factors, including female gender and age younger than 70 years, that are associated with increased long-term survival after pacemaker implantation.

Several studies have looked at predictors of survival after pacemaker placement, but in most cases the follow-up period was no longer than 6 years. Because a significant proportion of patients are still alive 10 years after receiving such devices, there is a definite need to identify factors associated with long-term survival.

As reported in the European Heart Journal for January, Dr. Michael Brunner and colleagues, from Universitätsklinik Freiburg, assessed the impact of baseline characteristics on long-term survival in 6505 patients who received a pacemaker. More than 30,000 years of patient follow-up were included in the analysis.

The median survival period following implantation was about 8.5 years, the researchers note. Nearly 45% of patients were alive after 10 years and more than 20% survived at least 20 years.

As expected, age at implantation was a strong predictor of subsequent survival. The median survival period for patients younger than 70 years was 170.9 months, more than double the period seen for older patients ($p < 0.0001$).

Although women were typically older than men at pacemaker placement, female gender was still significantly associated with increased survival. The median survival periods for women and men were 118 and 91.7 months, respectively ($p < 0.0001$).

Another strong prognostic indicator was the type of arrhythmia for which the pacemaker was placed. Sick-sinus syndrome was linked to a median survival period of 132.9 months, significantly longer than the 94.2-month survival seen with high degree AV-block, which was better than the 85.1-month survival for atrial fibrillation ($p < 0.0001$).

With more than 30,000 patient years of follow-up and an observation period of 30 years the present study is--to the best of our knowledge--by far the largest analysis of very long-term survival in pacemaker patients, the authors state. The results indicate that several baseline characteristics are predictive of increased long-term survival after placement, they add.

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