

Cardiac Devices Pose Tough Choices for the Elderly

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Senior Writer

WASHINGTON — Pacemakers and implantable cardioverter defibrillators can extend survival and improve functionality in properly selected cardiac patients, but given the lack of data from elderly individuals, choices can be complex and challenging.

"We don't have very good long-term randomized, prospective clinical trials in the very elderly to know exactly what the best therapy is," Dr. Brian Olshansky said at the annual meeting of the Society of Geriatric Cardiology.

"Not everyone is going to be saved with an implantable cardioverter defibrillator [ICD]," said Dr. Olshansky, a professor of



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DR. OLSHANSKY

medicine and a cardiac electrophysiologist at the University of Iowa, Iowa City.

But device therapy can be beneficial in elderly patients with tachyarrhythmias or bradyarrhythmias because these conditions can significantly impair the patient's daily activities, he noted.

On the basis of results from a recent review of a Medicare database, "what we can say is that people who receive ICDs [whether single chamber, dual chamber, or with cardiac resynchronization pacing], presumably for the right reason, do better than those who don't in a Medicare population," Dr. Olshansky said (*Heart Rhythm* 2008;5:646-53).

However, the benefit of pacemakers in this population is less clear. In the Pacemaker Selection in the Elderly (PASE) study, a single-blind, prospective, randomized trial that examined quality of life after pacemaker implantation in patients with a mean age of 76 years, use of a pacemaker significantly improved quality of life in patients with symptomatic bradycardia, but there was no difference in survival between dual- and single-chamber pacemakers, said Dr. Olshansky (*N. Engl. J. Med.* 1998;338:1097-104).

In some cases a pacemaker is only part of the solution in lieu of medications or procedures to treat tachyarrhythmias such as atrial fibrillation. Atrioventricular (AV) junction ablation can be an effective means of controlling fast ventricular rates caused by atrial fibrillation, improving quality of life and functionality.

"In my experience, elderly patients seem to get a tremendous benefit from AV junctional ablation in cases with fast rates in atrial fibrillation not controlled with medical therapy," Dr. Olshansky said.

"What is really most important is that an AV junctional ablation can allow patients to do what they want to do, like carrying groceries and climbing stairs," said Dr. Olshansky.

Cardiac resynchronization therapy

(CRT) for patients with impaired ventricular function, functional class III or IV heart failure, and a wide QRS complex may be an appropriate option, but it has not been well studied in patients older than 80 years, and it is more complicated and expensive than a single-site option, he noted.

But potential benefits of CRT include improved quality of life, as well as reduced heart failure symptoms and improved exercise tolerance. Also, studies have shown

that CRT can reduce hospitalization and the risk of death.

The Multicenter InSync Randomized Clinical Evaluation (MIRACLE) study, which included patients approximately 65 years old, significantly improved functional status over a 6-month follow-up period after CRT pacing, compared with a control group who received a CRT implant without pacing (*N. Engl. J. Med.* 2002;346:1845-53).

Another growing area is atrial fibrilla-

tion ablation, but older patients are at greater risk from this long, arduous procedure and they may derive less benefit, compared with a younger population. Although study findings suggest that this procedure may improve quality of life more than antiarrhythmic medications, these data do not include elderly patients.

Dr. Olshansky stated that he has served as a consultant and a member of the speakers bureaus for Medtronic, Boston Scientific, and Novartis. ■

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