It has been known for at least 2 decades that the second- and third-generation porcine and pericardial bioprosthetic valves treated with glutaraldehyde are the preferable aortic valve devices in patients ≥65 years old who require aortic valve replacement.\(^1\) Furthermore, many studies of patients in this age group, especially with coronary artery disease, have repeatedly demonstrated that these patients rarely outlive these valves.\(^2\) Bioprosthetic cardiac valves do not need warfarin anticoagulation for patients in sinus rhythm, an advantage for older patients who have many concomitant disease states or existing conditions that contraindicate warfarin anticoagulation.\(^3\) Because of recent modifications in valve fabrication, including the use of glutaraldehyde at low fixation pressures, pericardial and porcine bioprosthetic valves have become even more reliable in terms of valve integrity and are clearly the choices for aortic valve replacement in older patients.\(^4\)

See p 2178

That this principle has been appreciated for some time led to the codification of this concept in the American Heart Association/American College of Cardiology (AHA/ACC) valve guidelines published in 1998.\(^5\) Thus, the article in this issue of *Circulation* by Schelbert et al,\(^6\) who review >80,000 patients ≥65 years old who underwent isolated aortic valve replacement in >1000 US hospitals from 1999 to 2001, is a surprise. Many who work in valve surgery centers have taken the general principal of using tissue valves in older patients as part of today’s established practice guidelines. In our own experience from 1992 to 2004 at the Brigham and Women’s Hospital in 2447 patients ≥65 years old, 81% of all patients in this age group received a bioprosthetic aortic valve. Schelbert and colleagues’ report documents that only 52% of patients older than age 65 received cardiac tissue valve. Even in patients >90 years old, only 60% overall received a bioprosthetic valve. They also document that the smaller the volume of valvular heart surgery in older patients at a given hospital, the higher the probability of receiving a mechanical heart valve in older patients.\(^7\)

References


Key Words: Editorials • aortic valve • bioprosthesis • fibrillation • aged
Use of Heart Valves in Older Patients

Lawrence H. Cohn

Circulation. 2005;111:2152-2153
doi: 10.1161/01.CIR.0000165305.02689.86

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2005 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/111/17/2152

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org/subscriptions/