

# Mitral Valve Repair and Old Age: a Possible and Useful Combination.

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## Abstract

Over the last few years cardiac changed radically and so has the average age of the heart disease population progressively increased. Mitral valve surgery has a significant margin for progress in conservative vs replacement strategy. Mitral disease due to insufficiency in the elderly population has historically suffered from lower repair rates but deficiency alone should not limit repair operations in a specialized environment ensuring good survival.

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Mitral valve surgery immediately after treatment of congenital diseases represents the symbol of the birth of Cardiac Surgery more than 70 years ago (1). Over the last few years cardiac diseases, from an epidemiological point of view, has changed radically in industrialized countries and so has the average age of the heart disease population progressively increased. Simultaneously with the rapid advancement of transcatheter alternatives to surgical approaches, surgical community is looking for less invasive techniques to provide a fair reference to these changing needs (2).

Mitral valve surgery is one of these operations that has a significant margin for progress, both through conservative vs replacement surgical strategies, and through technical improvement to optimize the results inherent to the operation itself.

Muncan and colleagues address this in their study by showing that repair in the older population can achieve excellent results (3).

In their comparison series using a large database, the authors reported that survival and freedom from reoperation were not significantly different between repair and replacement.

The finding is inspiring, because mitral disease due to insufficiency in the elderly population has historically suffered from lower repair rates, possibly due to existing evidence suggesting they are less durable.

The report is an encouragement to prefer the repair option even in elderly patients whenever possible.

In expert hands, Mitral pathology can be repaired effectively and safely. The presence of a deficiency alone should not limit repair operations in a specialized environment ensuring good survival and other favorable results when compared to those of replacement. Taken together, the report encourages the expansion of mitral repair options in centers of excellence.

Under a rigorous evaluation of the comparative effectiveness between surgical and less invasive alternatives, it is all the more critical that the surgical community fulfills the maximum benefit that the surgical approach can offer.

The authors should be congratulated for challenging conventional wisdom and encouraging us to critically evaluate potential options for mitral valve repair in case of insufficiency

1 Hines GL, Kolwitz CE. Charles Bailey and the Early History of Mitral Valve Surgery. *Cardiol Rev.* 2021 Jul-Aug 01;29(4):163-164

2 Ramlawi B. The Era of Catheter-Based and Minimally Invasive Cardiac Surgery. *Methodist Debaquey Cardiovasc J.* 2016 Jan-Mar;12(1):3.

3 Muncan B, Amabile A, Kalogeropoulos AP, Geirsson A, Krane M. Midterm Outcomes of Mitral Valve Repair versus Replacement in Elderly Patients A Propensity Score-Matched Analysis. *J Card Surg, JOCS-* 2022-ORIG-1238