A Concern About 2-Minute Glutaraldehyde-Treated Autologous Pericardium for Mitral Valve Repair — Reply —

We very much appreciate your careful evaluation of our paper regarding the stability and strength of 2-min glutaraldehyde-treated autologous pericardium.

As you point out, our mean follow-up time of 4.3 years may not be long enough to fully assess durability. We are surely going to follow the behavior of autopericardia treated with 0.625% glutaraldehyde for 2 min, although no difference so far has been noted with the xenopericardia we used in this series.

As we mentioned in our paper, our purpose in utilizing glutaraldehyde was not only obtaining cross-linking of autologous pericardium but also fixation/sterilization in both the infected area and nearby intact mitral tissue. We posited that the autopericardial patch and the treated mitral valve tissue should have the same property of softness after the treatment. The 15-min treatment of the autopericardium makes it too hard for this purpose. We know that most congenital cardiac surgeons in Japan use the 1–2-min preserved autopericardium as a patch to repair ventricular septal defects or other congenital cases; their results have been good and established the position of routine maneuver. We do not have enough scientific data on the sufficiency of cross-linking in the mitral tissue and autopericardium, but we hope that our experience will consolidate the data in the future. Thank you very much for your letter.

Reference


Ken Nakamura, MD, PhD
Kazuhiro Hashimoto, MD, PhD
Department of Cardiac Surgery,
The Jikei University School of Medicine,
Tokyo, Japan