Ross Operation and Right Vetricular Outflow Tract Reconstruction with Stentless Xenografts

Konertz, W., Sidiropoulos, A., Hotz, H., Borges, A., Baumann, G.

Abstract

Traditionally a homograft valve is used as a pulmonary replacement device for the Ross operation. Right ventricular outflow tract reconstruction during aortic valve replacement with an autograft was performed with stentless xenograft valves in nine patients. Hemodynamic performance is satisfying, but long term evaluation is needed.

The recent interest in the autograft (Ross) procedure for aortic valve replacement has lead to an increasing shortage of the homografts which are needed for right ventricular outflow tract reconstruction. This prompted us to use commercially available stentless porcine xenografts as pulmonary valve replacement devices....

.... We conclude from this limited series that RVOT reconstructions with stentless aortic xenografts is feasible and shows normal pulmonary valve function. Valve related complications could not be observed in the short term (three to 20 months; median 12 months).

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