switch operations [2], and we wanted to simplify the procedure and reduce the risk of bleeding by avoiding the transection of aorta and reanastomosis. Tension-free anastomosis was accomplished by sufficient dissection of the pulmonary arterial branches beyond the pericardial reflection. The pulmonary arterial trunk was incised longitudinally on its anterior aspect, and then direct anastomosis was performed. If this direct anastomosis caused tension, the pulmonary artery incision was extended more distally.

It is important to decide whether the main pulmonary artery will be translocated on the right or the left of the aorta. Therefore, we believe the essential point of this procedure is the translocation of the pulmonary artery. In our series of 25 cases, 7 cases involved translocation of the main pulmonary artery to the right of the aorta, based on the initial position of the great arteries.

In all cases, we placed a monocusp valve in the pulmonary outflow tract expecting this valve to improve the immediate postoperative result by preventing a sudden hemodynamic change from a pressure-loaded right ventricle to a volume-loaded ventricle. Pulmonary regurgitation was insignificant in all patients. However, among 5 patients who had reoperations for residual pulmonary stenosis, 4 had severe calcification of the monocusp valve. In five recent cases, we used Gore-Tex membrane, which is thought to have a water-repellent nature and makes calcification less likely [3,4]. Analyzing our results, it appears that the long-term fate of the reconstructed pulmonary outflow tract depends primarily on the monocusp valve, which is prone to progressive calcification, degeneration, and subsequent valvular dysfunction over time, although this type of repair has an advantage in terms of the potential for the growth of the patient's own native pulmonary artery.

Some possible suggestions of the relatively high incidence of obstruction by the calcification of monocusp valve may exist: (1) by not applying Lecompte maneuver in our series, turbulence and vortex may develop within the pulmonary outflow tract, possibly resulting from a laterally deviated pulmonary artery by the aorta remaining in situ; (2) turbulence and vortex may exist: (1) by not applying Lecompte maneuver in our series, turbulence and vortex may develop within the pulmonary outflow tract, possibly resulting from a laterally deviated pulmonary artery by the aorta remaining in situ; (2) our technique of implantation of monocusp valve; and (3) the influence of custom-made glutaraldehyde solution.

References


References


*[The authors of the original paper [1] were invited to comment on this Letter to the Editor but declined the offer.]*

**Letter to the Editor**

Safety of off-pump coronary artery surgery: no more skepticism please!*

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Stamou and colleagues [1], and the editorial staff of *EJCTS*, deserve credit for carrying out and publishing results of the first-ever propensity matched score analysis comparing solely the operative mortality rate after off-pump coronary artery bypass (OPCAB) and conventional coronary artery bypass grafting. Their results suggest that in *unselected patients* with multivessel disease a lower operative mortality rate can be achieved with the OPCAB technique compared with the conventional on-pump approach. This finding is without doubt the last nail in the coffin of skeptics who for almost a decade have regarded OPCAB as a technique with the potential for intra-operative myocardial ischemia, suboptimal anastomoses, and a protracted learning curve.

Presently, abundant evidence is available to suggest that excellent results can be achieved when cardiopulmonary bypass is avoided [2–5]. Comparison between the costs of both procedures also tilts the balance in favor of OPCAB. From the material costs per patient needed to perform a routine operation to the other economical aspects, such as bed occupancy, postoperative complications, and transfusion requirements, OPCAB has been shown to be at least equivalent if not superior to CPB [2,5]. Objective analysis through randomized controlled trials has also proved that incomplete myocardial revascularization and early anastomotic dysfunction, previously thought as severely compromising this technique, are merely unfounded fears and probably an accompaniment of the learning curve as is seen with any new technique [2–5].

With increasing experience OPCAB can be safely performed in *unselected patients* [2]. In fact, more than patient condition, an individual surgeon’s competence and common sense are probably the most important determinants of selection criteria for OPCAB surgery. Hence, the argument that a select few can possibly benefit from OPCAB also no longer holds true. In the last decade or so, OPCAB has been tested through an increasingly rigorous process of scientific validation. From a large number of observational, case-matched, retrospective analyses to randomized controlled trials, there is plenty of evidence to validate that OPCAB surgery is now a proven, safe, cost effective and reproducible surgical technique. The study of Stamou et al. [1] by statistically proving the safety of OPCAB finally marks once and for all ‘the triumph of technical skill’ over ‘fears and ego of the skeptics’.

**References**


*[The authors of the original paper [1] were invited to comment on this Letter to the Editor but declined the offer.]*

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