since the use of a prosthetic ring seems to greatly enhance the durability of the mitral homograft.[2] Using the wall of the aortic homograft and a low insertion of the valve so as to exclude the aorto-mitral abscess when present made unnecessary any reconstruction of the left atrial roof. The mean bypass time was 192 ± 11 minutes, which is comparable with the monobloc aorto-mitral technique according to Obadia and suggests that the preservation of an intact aorto-mitral continuity did not spare any significant ischemic time. Among our 6 patients, there was no in-hospital death. One patient died at 47 months of cerebral hemorrhage, and there was one reoperation for recurrence of endocarditis at 69 months. After a mean follow-up of 59 ± 6 months, the remaining 4 patients were asymptomatic and 1 patient had had from a normal pregnancy. In conclusion, although technically challenging, a combined aortic and mitral valve replacement with two separate homografts can also be a valid option in highly selected cases.

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Reply to the Editor:

The comment by Christophe Acar discusses the alternative between monobloc aorto-mitral homograft, as my colleagues and I have proposed, or separate aortic homograft plus mitral homograft, which he appears to prefer. In our opinion, the indications are not strictly the same.[1] The patients reported in Acar's series were very different from ours. Our patients had much more severe disease and always had a history of multiple reoperations with at least one if not two prostheses in place. The justification for a monobloc procedure is related to the presence of a large abscess in the aorto-mitral curtain, and the main value of monobloc reconstruction is to allow complete resection of the aorto-mitral curtain and therefore all of the infected tissues. This is impossible with a separate aortic replacement plus mitral replacement, which obviously leaves all or part of the subaortic curtain in place.

In contrast with Acar's claim, the technique that we propose is not necessarily more difficult to perform. Access to the papillary muscle is largely facilitated by a very large aorto-mitral orifice obtained after resection of all of the subaortic curtain, providing excellent exposure of the papillary muscles, which facilitates suture of the mitral homograft.

Christophe Acar has an extensive experience with mitral homografts, and his studies inspired us to systematically insert a mitral ring onto the mitral homograft to limit, as rightly suggested by Acar, the risks of mismatch, which are effectively a risk factor for secondary homograft dysfunction.

In conclusion, as suggested by Christophe Acar, separate homografts could be reserved for patients with distinct aortic and mitral lesions. In contrast, we think it is logical to maintain the principle of a monobloc procedure, which is the only technique allowing resection of aorto-mitral abscesses. I believe that the most important point is the quality of the resection phase. Homograft reconstruction has not been demonstrated to be superior to monobloc mechanical prosthesis, which can therefore be preferred in the absence of an available monobloc homograft in the tissue bank.

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What patients want: A new biological era in valvular prostheses

To the Editor:

We read with great interest the article by Smedira and associates.[1] It deals with the important issue of valvular disease and gives further data to help surgeons to choose the right prosthesis.

One of the points that attracted our attention was the aim of the study. As the authors clearly expressed, the renewed interest in biologic prostheses reflects increased attention given by patients to the biologic valve.

We are experiencing a similar trend. An increasing number of patients are well informed about the benefits and risks of all types of prostheses when they are admitted to the hospital for valve replacement. Contrary to guidelines, a growing number of patients prefer to choose a biologic prosthesis, even if they are young and will require a prosthesis replacement. The reasons for this trend vary. First, a patient who must undergo valve replacement is interested not only in life expectancy but also in quality of life. Anticoagulant therapy is considered a major limitation to quality of life, especially in those young patients who have an active lifestyle and do not want to change their habits. Moreover, they are more concerned by the risk of thromboembolism linked to mechanical prostheses and to anticoagulation than by reoperation. Patients actually know that mortality and morbidity risks after reoperation are decreasing.

Another important topic that is leading more patients to choose a biologic prosthesis is the strong belief in technology and technologic advances. Starting with the consideration that the mean life expectancy of biologic prostheses is calculated on valves implanted 15 to 20 years ago, newer prostheses probably will last longer because they are constructed with new techniques and treated with new anticalcification treatments. Moreover, those patients strongly believe that future replacement prostheses probably will have an even longer life expectancy.

The surgeon must take note of this new trend. In our institute we are implanting an increased number of biologic prostheses even in younger patients. Even the number of Bentall operations performed with biologic valves is increasing, as is the number of valve repairs. Moreover, we have started

a research program with the aim of constructing recellularized homografts so that we can offer new alternatives to mechanical prostheses, as other institutes are doing.

The role of the patient is a determining factor in the choice of the prosthesis today. Patients are well informed and their choice is opening a new era in the field of biologic prostheses.

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Is there any difference between surgical outflow reconstruction and transcatheter valvotomy in patients with pulmonary atresia with intact ventricular septum?

To the Editor:

I read with great interest the article by Daubeney and associates[1] for the UK and Ireland Collaborative Study of Pulmonary Atresia with Intact Ventricular Septum. This is an ongoing population study comprising 183 patients. The authors report that independent risk factors for death were low birth weight, unipartite right ventricular morphology, and the presence of a dilated ventricle.

The primary procedure comprised a systemic-pulmonary shunt in 81 patients, percutaneous transcatheter valvotomy in 40 patients, surgical outflow reconstruction alone in 27 patients, and surgical outflow reconstruction with a concomitant shunt in another 18 patients.

I would like to ask some questions about patients who received surgical outflow reconstruction and the group of subjects who underwent a percutaneous approach:

1. Was there any difference in terms of survival between the two groups?
2. How many subjects treated with a percutaneous approach needed a systemic-pulmonary shunt after the transcatheter procedure?
3. Was there any difference between the two groups in terms of right ventricular morphology and/or tricuspid valvular z score?
4. Was there any difference in terms of the achievement of type of repair (biventricular, univentricular, mixed, or one-and-a-half ventricular)?

In fact, there is no agreement about the best approach to use to open the right ventricular outflow tract in subjects who have the membranous type of pulmonary atresia with intact ventricular septum with a tripartite or bipartite right ventricle. Finally, no comparative studies exist.

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doi:10.1016/j.jtcvs.2006.02.055

Reply to the Editor:

In the UK and Ireland Collaborative Study of Pulmonary Atresia with Intact Ventricular Septum, 67 of 183 patients underwent a primary procedure on the outflow tract without construction of a shunt: surgical in 27 and transcatheter in 40. Mortality was 26% in the surgical group and 20% in the catheter group. Among the survivors, risk of reintervention within 6 weeks to increase flow of blood to the lungs was significantly higher in those who underwent catheter intervention than in those who underwent surgery. In many cases this was due to failure to cross the atretic pulmonary valve during the initial catheter procedure. When the pulmonary valve was successfully crossed at catheterization, the proportion requiring early reintervention was comparable with that of those treated surgically.

These data represent the earliest experiences in the United Kingdom and Ireland of catheter perforation and dilatation of the atretic pulmonary valve in this condition. In cases in which the atretic pulmonary valve can successfully be crossed, transcatheter intervention can produce good outcomes in the short term comparable with those achieved by surgery. Full details will be published shortly.

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