without VSD). We speculated that the decreasing incidence of postoperative seizures compared with previous reports, particularly among children undergoing biventricular repair, was due to improved (intraoperative and perioperative) management strategies. It is likely that specific anatomic subgroups previously considered to be at high risk for postoperative seizure activity are no longer at increased risk. As Hashmi, Hanif, and O'Reilly note, we did not report duration of seizure activity. However, we did evaluate the number of seizures in the monitoring period as a risk factor for worse neurodevelopmental outcome. The number of seizures was not predictive of scores on either the Mental Developmental Index (MDI) or the Psychomotor Developmental Index (PDI) of the Bayley Scales of Infant Development-II.

Hashmi, Hanif, and O'Reilly also ask whether the EEG examiners were blinded to the fact that the child had a seizure in the postoperative period. As the recent study evaluated neurodevelopmental outcomes, we assume that they do not mean the EEG examiners, but rather the psychologists performing the 1-year neurodevelopmental evaluation, who were blinded to the child's seizure status.

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Internal thoracic artery grafts to right coronary system

To the Editor:

We read with interest the article by Sabik and coworkers,¹ "Influence of Patient Characteristics and Arterial Grafts on Freedom From Coronary Reoperation." We congratulate the team of surgeons from The Cleveland Clinic for coming up with another landmark article that will be of immense benefit to both surgeons and patients around the world.

We agree with Sabik and coworkers¹ that aggressive risk factor modifications and more extensive use of arterial grafts are necessary for reduction of reoperations. They identified a reduced early hazard phase when there was incomplete right coronary artery (RCA) revascularization. During their discussion, they presented no valid reason for this apparently anomalous finding and remarked "It is hard to understand how incomplete revascularization to the RCA and elevated triglyceride level both lowered the early risk of reoperations."¹

We have had similar experience with patients with a diffusely diseased RCA either bifurcating or trifurcating into small-caliber vessels, with none suitable for grafting. In this situation, not grafting the RCA would not disturb the native collaterals and would probably result in better immediate postoperative results, as demonstrated by Sabik and coworkers.¹ Endarterectomy in this situation would still result in incomplete revascularization, because the plaque cannot be removed completely from the small distal vessels, consistent with the poor early results seen with RCA revascularization.

In the later part of the study, internal thoracic artery grafting to RCA did reduce reoperation rates. Sabik and coworkers should specify what proportion of these patients in the early and later portions of the study had the posterior descending artery grafted, in contrast to distal RCA grafts. Posterior descending artery grafts show significantly better patency rates and are associated with lower postoperative morbidity.² We have observed fewer postoperative coronary events when the posterior descending artery is grafted instead of the distal RCA. We believe that the benefit observed in the later part of the study may have been due to a trend toward posterior descending artery grafting.

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Monobloc or separate aortic and mitral homografts?

To the Editor:

Recently, Obadia and associates¹ reported their experience with monobloc aorto-mitral homograft for extensive endocarditis. Since 1994, we have performed combined aortic and mitral valve replacement with homografts in 6 patients (mean age: 31 ± 7 years). However, two separated valves were used for the reasons explained below. The etiology of the valve disease was rheumatic (n = 3), congenital (n = 1), or bacterial endocarditis with abscess of the aorto-mitral junction (n = 2). One patient was undergoing a third reoperation for prosthetic valve dehiscence. As in Obadia's technique,¹ the first step of the operation was fixation of the papillary muscles, whose exposure can be very difficult. It was anticipated that a bulky aorto-mitral monobloc, once lowered into position, would somewhat obstruct the access to the papillary muscles. In addition, the use of an aorto-mitral monobloc would necessarily have restricted the panel of available sizes, increasing the risk of mismatch, which has been shown as a factor of mitral homograft dysfunction.² Thus, it was decided to implant two separate homografts. The aortic and the mitral valve were approached separately through the standard incisions. Part of the papillary muscle sutures were inserted through the aortic orifice. The mitral valve homograft was inserted according to a previously described technique, which invariably included ring annuloplasty.² This latter technical detail is probably relevant

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