

LETTERS TO THE EDITOR

Partial sternotomy: A mini approach for maxi exposure

To the Editor:

In response to a letter to the Editor by Moreno-Cabral in the Journal (1997;113:810-1), I want to endorse his enthusiasm for the partial lower sternotomy. I, too, have been frustrated with the limitations of exposure of the heart via left and right anterolateral thoracotomy. In contrast, partial lower sternotomy up to the second intercostal space with bilateral transection of the sternum at the top of the incision allows adequate exposure for a wide variety of operations.

Over the past 3 months, I have performed 29 operations using partial lower sternotomy. All patients received from one to five coronary bypasses; in 26, the left internal thoracic artery was used and, in one, the right internal thoracic artery. In addition, two had resection of a left ventricular aneurysm, one replacement of both the aortic and mitral valves, and two replacement of the aortic valve. In one patient (coronary bypass plus double valve replacement), the sternal incision was extended to the first intercostal space and the sternum was transected at that level.

Postoperative pain was less than in patient with anterolateral thoracotomies. Blood loss was less than in patients with complete sternotomy. The skin incision was shorter than with complete sternotomy and only slightly longer than that need for the anterolateral thoracotomy approach.

Partial sternotomy is a worthwhile alternative to complete sternotomy and has many of the advantages of other minimally invasive techniques.

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The right internal thoracic artery for myocardial revascularization

To the Editor:

We read with great interest the report by Ueyama and associates (J Thorac Cardiovasc Surg 1996;112:731-6) regarding revascularization of the posterolateral myocardial wall with the right internal thoracic artery (ITA) graft via the transverse sinus. This technique, published by us¹ in 1984 as a complementary method to use with the left ITA to the left anterior descending branch, provoked several comments concerning early morbidity, such as hemorrhage, mediastinitis, and late occlusion of the graft. On this subject, publications by Galbut,² Buche,³ and Ueyama and colleagues,⁴ as well as our own report,⁵ show that the incidence of reoperation for bleeding ranged from 1.9% to 2.6% and mediastinitis from 0.9% to 2.6%, values normally found with any cardiac operation. The

late patency rate of the right ITA through the transverse sinus and grafted to the circumflex artery or obtuse marginal branch ranged from 80.6% to 98%.^{2,3,5} In our 233 patients who received both ITAs with or without saphenous vein grafts or the inferior epigastric artery, there were 49 late recatheterizations (average 61.9 months) and the patency of the grafts was as follows: 45 (92%) right ITA grafts, 47 (96%) left ITA grafts, and 19 (70%) saphenous vein grafts. In symptomatic patients with both ITAs patent, reoperation was never necessary. Only one patient required reoperation, 6 months after the original operation, because of the occlusion of the two ITAs. The great advantage of using ITAs or other arterial grafts for the left anterior descending branch and the obtuse marginal branch of the circumflex artery is to avoid late reoperation. We think that in due time we will choose the arterial graft most appropriate for each specific coronary artery. On the basis of our results, we continue to choose both ITAs for revascularization of the branches of the left coronary artery in patients up to 70 years of age who do not have excessive obesity, severe diabetes, or other important risk factors.

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REFERENCES

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Reply to the Editor:

We were intrigued with Dr. Puig's response. We also believe that use of the right internal thoracic artery (ITA) via the transverse sinus to revascularize the circumflex