Letters to the Editor


http://dx.doi.org/10.1016/j.jtcvs.2013.11.005

FATE OF THE PRESERVED AORTIC ROOT IN ACUTE TYPE A AORTIC DISSECTION

To the Editor:

I read with great interest the article by Rylski and colleagues regarding the fate of unreplaced aortic root in patients with conservative aortic root repair for acute type A aortic dissection. By retrieving data concerning 119 patients undergoing supracoronal ascending aortic replacement for acute type A aortic dissection, they found that dissection of all aortic sinuses of Valsalva at the index procedure was an independent predictor for aortic root reoperation (odds ratio, 3.57; 95% confidence interval, 1.36-9.35; *P* < .01). During the follow-up period, 10 patients underwent reoperative surgery for aortic root replacement as a result of new-onset aortic root disease, including aortic root aneurysm, aortic valve insufficiency, and suture false aneurysm.

Note that reoperative surgery was performed in these 10 patients because of new-onset aortic root disease. Logically, factors determining new-onset root disease are also responsible for predicting reoperative surgery. How do Rylski and colleagues explain the absence of correlation between dissection of all aortic sinuses and new-onset aortic disease (odds ratio, 1.28; 95% confidence interval, 0.49-3.37; *P* = .62). Rylski and colleagues identified the extension of the dissection to the iliac arteries as another risk factor for secondary aortic root disease. Reports from the literature are sparse, with only a very limited number of studies published on the topic. Ro and colleagues recently published a retrospective study including 196 patients with an aortic root conservative repair for acute type A aortic dissection. The cutoff level for replacing the aortic root at the time of initial surgery remains controversial; however, the results of the study of Ro and colleagues provide insights into the extent of aortic valve regurgitation and aortic root dilatation in this subset of patients, as well as a clearer indication for aortic root replacement during the initial procedure. They clearly demonstrate that patients with an aortic root diameter larger than 47 mm are at an increased risk for development of a root aneurysm, with subsequent intervention.

Taking into consideration these conclusions, it is easier to recognize those patients with acute type A aortic dissection in whom aortic root disease will develop during the follow-up period. More aggressive approaches should therefore be considered for patients who have aortic root dissection of all sinuses, aortic root diameter larger than 47 mm, or dissection involving iliac arteries.

Jamil Hajj-Chahine, MD
Department of Cardiothoracic Surgery
University Hospital of Poitiers
Poitiers, France

References


http://dx.doi.org/10.1016/j.jtcvs.2013.10.074

Reply to the Editor:

We value receiving useful feedback in another letter to the Editor from Dr Hajj-Chahine. We also appreciate his summary of our results and his question regarding the factors predicting new-onset aortic root disease and aortic root reoperation after surgery for acute type A aortic dissection with preservation of the sinus segment.

In our study of 119 patients with acute type A aortic dissection who underwent emergency ascending aortic replacement with sinus segment preservation, 26 patients exhibited evidence of new-onset aortic root disease during the follow-up period. Of these 26 patients, 10 required secondary proximal surgery. Dissection of all aortic sinuses of Valsalva was an independent predictor for aortic root reoperation (odds ratio [OR], 6.01; *P* < .05). However, this risk factor was not associated with new-onset aortic root disease (OR, 1.28; *P* = .62). A similar discrepancy was observed regarding dissection extending to the pelvic arteries, which was predictive of new-onset aortic root disease (OR, 3.57; *P* < .01) but was not predictive of root reoperation (OR, 1.65; *P* = .48).

Although at first view, the predictors of new-onset aortic root disease might also predict aortic root repeat interventions, one should remember that this was an analysis of risk factors in 2 different groups, because not every case of aortic root disease requires repeat intervention. The risk factors for new-onset aortic root disorders and for root reoperations could, therefore, differ.

The advantages of aortic root preservation, such as avoiding coronary artery manipulation, reducing the crossclamp time, eliminating the risk of prosthetic valve endocarditis, and avoiding the permanent need for...