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REPLY: LEAVE WELL ENOUGH ALONE
Reply to the Editor:
We thank Jasinski and colleagues1 for their recent letter, which addressed the hot topic of optimal aortic annuloplasty. The authors suggest the introduction of a double aortic annuloplasty combining an external ring/suture with the internal HAART system (COR-CYM, Inc). We are aware of the extensive experience of the Wroclaw group in aortic valve repair surgery and are certainly intrigued by their insights.

The authors basically claim that, in specific cases, a simple aortic annuloplasty may not be sufficient to preserve the annulus from further enlargement, jeopardizing the durability of the valve repair. In our recent work,2 we showed how in reimplantation procedures, the advocated asymmetry of the neoannulus, de facto, replicates the natural configuration of the aortic root. Indeed, in normal anatomy the ventricular-arterial junction is not perfectly co-planar with the virtual basal ring, and it is also well known that the sinotubular junction plane is slightly tilted in respect to the virtual basal ring plane.3 A further finding, based on another study from our group, has clearly showed how the annular shape, which is naturally slightly elliptical in normal tricuspid aortic valves, is forced into a circular morphology with reimplantation.4 All these features are purely anatomical, and no implication was found with the valve function or with the patients’ prognosis in terms of recurrent aortic regurgitation (AR).5

We know from extensive data present in the literature6 that a recurrence of AR is demonstrated in remodeling procedures lacking annular stabilization, but there are no data to extend this concept to reimplantation or external ring annuloplasty. In this regard, we want to underline that the cited cardiac magnetic resonance functional study7 showed a correlation between recurrent AR and aortic orifice area, not aortic annulus area.

In conclusion, although we praise novel and courageous efforts to ameliorate long-term stability of aortic valve repair, we also recommend prudence in surgical overdoing, especially if it involves the use of an intravascular prosthetic material, with its related risk of valve damage, infections, or flow alteration, when the current evidence does not support a clear advantage.

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