

The authors reported no conflicts of interest.

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and it is clear that using rigid vascular grafts, either straight or anatomically shaped, is far from what we are ultimately trying to achieve. Further developments with the use of elastic grafts⁷ seem to be a further step in the right direction. As long as imitation of aortic root anatomy does not have any clear clinical benefit compared with the use of straight grafts, however, straight grafts will remain our preferred prostheses.

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**REPLY FROM AUTHOR:
“NIL DIFFICILE VOLENTI”
(NOTHING IS DIFFICULT
FOR THE ONE WHO
WANTS)**



Reply to the Editor:

I read with interest the letter by Misfeld and Borger¹ regarding the opportunity to use the Valsalva graft when performing a valve sparing procedure using

the reimplantation technique. Their title is certainly intriguing and deserves some comments.

Misfeld and Borger¹ stated that they could use a graft with sinuses (the Valsalva graft), but they did not want to do so. Although I fully respect their opinion, based as it is on a long and strong professional experience, at the same time I disagree with such an attitude, because I consider it important in surgery to reestablish a normal anatomy that, in turn, guarantees a normal function. To this extent, it is important to underline how often “form follows function,” as beautifully explained by Zehr² in a recent editorial.

When we replace a section or a portion of the human body, we always attempt to better reproduce and simulate the beauty of nature. By using a straight graft when replacing the root, we are in fact trying to mimic Mother Nature. If we use a graft with sinuses, however, we simply get closer to our scope. If one day we could have an elastic graft with sinuses, we could probably fully mimic Mother Nature. It is noteworthy that Misfeld and Borger¹ correctly stated that a graft with sinuses is able to reproduce better the natural anatomy of the root and correctly stated that the presence of vortices inside the sinuses guarantees natural and physiologic dynamics of the leaflet during both systole and diastole. They incorrectly stated, however, that proper positioning of commissures of unequal height could pose a problem when using the Valsalva graft. Proper positioning of the commissures, while respecting their different height, depends exclusively on the surgeon and is equally possible with a straight or a Valsalva graft. The only difference is that in the case of the Valsalva graft, they need to be at the level or above the new sinotubular junction. Furthermore, Misfeld and Borger¹ failed to mention other positive effects of the presence of sinuses on maintaining a laminar flow in the ascending aorta, avoiding flow malrotation, and normalizing wall shear stress.³ Finally, they failed to mention minor practical aspects that make a Valsalva graft appealing, such as the ease of suturing inside the graft and the reduced tension on the coronary anastomosis, even in a valve-sparing configuration.

If we put all these aspects together, it is difficult to find a single reason not to use such graft with neosinuses. Misfeld and Borger¹ based their decision on the lack of evidence that the Valsalva graft or any graft with sinuses could in fact improve long-term clinical results. It is evident, however, that the graft is only one component, and often not the most important, in guaranteeing satisfactory long-term results. Suturing, tensioning, and geometric positioning, among many other factors, are certainly as important as a good graft prosthesis.

For the time being, we can certainly choose to mimic as much as possible Mother Nature, with the conviction that what looks better will certainly, sooner or later, function better.

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The author reported a conflict of interest as the inventor of the Valsalva graft.

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