The authors reported no conflicts of interest.

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Meanwhile, several studies had documented postoperative thrombocytopenia after Perceval S implantation.³⁻⁸

These studies, like our own, suggest that the thrombocytopenia after implantation of the Perceval S aortic bioprosthesis is more pronounced than the thrombocytopenia that is commonly found after aortic valve implantation with other bioprostheses. We therefore believe that these conditions should not be mixed, as Vendramin and Bortolotti¹ seem to do. We further believe that the existing studies—including our own—that describe the phenomenon of a pronounced postoperative thrombocytopenia after implantation of the Perceval S bioprosthesis are too small to detect small differences with respect to clinical outcomes. Vendramin and Bortolotti¹ are right that there is little evidence of a significant detrimental effect, but we cannot exclude a small one. We believe that even if we are not able to identify the reason for the pronounced thrombocytopenia after implantation of the Perceval S, we need to ascertain that it has no detrimental effect at all. Because the Perceval S is used relatively often in some departments, more meaningful outcome data regarding blood loss, transfusion requirements, and rethoracotomy rates might be generated relatively easily and compared with those associated with other bioprostheses. We therefore still stand with our conclusion that the observed “thrombocytopenia should be taken seriously, and other surgeons are encouraged to look in their data whether...there are clinical consequences associated with it.”

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“POSSUM, SED NOLO” (I COULD, BUT I DON’T WANT TO)

To the Editor:

We read with great interest the article “Mimicking mother nature: the Valsalva graft” by De Paulis and colleagues¹ in this issue of the *Journal*. The specific features of this graft are obvious and have advantages with regard to Bentall procedures, especially in large aortic root diameters, as the coronary buttons do not need to be extensively mobilized. The authors emphasize the importance of precise surgical technique when performing valve-sparing procedures with this graft. In particular, proper positioning of the tip of the commissures at the level of the neo-sinotubular junction are well described. However, this is only possible when all 3 commissures are of the same height, which is not always the case. This shortcoming has been overcome by the use of another graft incorporating 3 anatomically shaped sinuses (Uni-Graft W SINUS; BBraun, Melsungen, Germany).²

Both grafts and modifications of the original reimplantation technique (ie, David V procedure) seem to be able to accomplish or at least closely approximate normal anatomic-shaped aortic root geometry. Using these graft options, opening and closing characteristics of the aortic valve cusps are more physiological than straight grafts.³ However, beneficial hemodynamic characteristics of grafts mimicking aortic root anatomy have not been translated into improved long-term clinical results of the reimplantation technique, as demonstrated by Dr David, who has used a straight graft for the reimplantation technique with excellent outcomes over many years.⁴ Therefore, anatomically shaped grafts do not seem to have a clear clinical benefit compared with straight grafts. Such grafts may “look better” on imaging, but by using them, we are far away from being able to fully mimic Mother Nature.

Aortic valve function is a complicated and sophisticated interaction of the different components of the aortic root⁵ incorporating highly differentiated anatomic structures,⁶

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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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