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Commentary: When is less more?

Pranava Sinha, MD

Luo and colleagues¹ present an interesting technique as an alternative to the Doty technique² for repair of supravalvular aortic stenosis. The authors present 8 patients with a median age and weight of 12.4 years and 7.6 kg, respectively, who underwent supravalvular aortic stenosis repair using the H-repair at a single center. The proposed benefit of the procedure is its technical ease and simplicity (compared with Brom's 3-patch technique³) and the ability to easily maintain the longitudinal aortic dimension (which is presumed to be the main reason for right coronary artery distortion with the Doty repair). Three patients in the series required concomitant aortic arch augmentation. In a median follow-up time of 2.6 years, although there were no coronary issues or deaths, 1 patient developed severe aortic valve insufficiency, which may be attributed to the valve morphology and previous intervention.

The technique may be effective for patients who have localized disease morphology with an adequate-sized left coronary sinus that does not require augmentation. Another potential beneficiary of this technique may be a patient who needs concomitant aortic arch repair by extending the anterior patch onto the distal aorta. As has been described previously,^{2,4} patients with diffuse rather than the localized type of supravalvular stenosis are more likely to present with ascending aortic and arch involvement and would not be optimal candidates for this proposed modification; they would be better served with Brom's 3-patch repair. Although this technique may have some advantages over the Doty technique, longer follow-up will be needed to

From the Department of Cardiovascular Surgery, Children's National Hospital, Washington, DC.

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- Address for reprints: Pranava Sinha, MD, Department of Cardiovascular Surgery, Children's National Hospital, 111 Michigan Ave, NW, Washington, DC 20010 (E-mail: psinha@childrensnational.org).
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Pranava Sinha, MD

CENTRAL MESSAGE

This interesting technical modification for addressing supravalvular aortic stenosis may be an alternative for a subset of patients with localized disease sparing the left coronary sinus.

confirm these findings with regard to need for reintervention in the longer term.

The primary question is not whether or not the H-repair is superior to the Doty repair, but when should one choose to employ the H-repair instead, given the symmetric restoration of the aortic root anatomy⁵ and excellent early and late outcomes achieved with the multisinus Brom's 3-patch repair technique?^{6,7} As experience and longer-term outcomes are better defined, perhaps in a selected group of patients with localized pathology the simpler H-repair may be the procedure of choice.

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