

Pulmonary Autograft Sinus Muscular Inclusion: A Relative Contraindication for Ross Procedure



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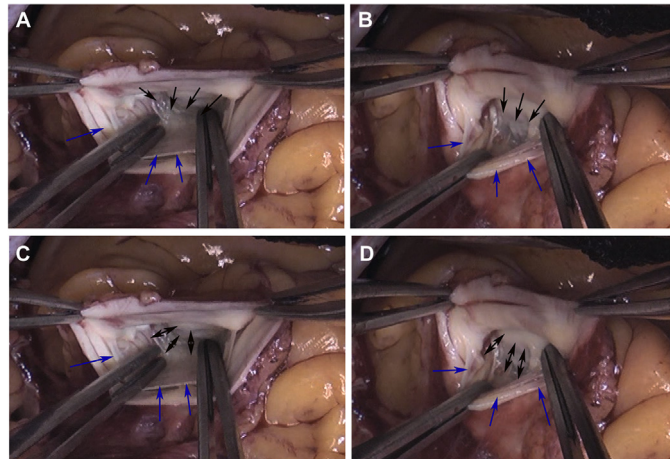


FIGURE 1

Muscular inclusion at the base of the right coronary sinus in aortic valves has previously been described by our group. It occurs due to crossing of the ventriculoaortic junction above the level of the virtual basal ring and aortic cusp insertion.¹ This anatomic entity, however, has not been previously described in pulmonary valves. Herein, we are demonstrating that muscular inclusion at the base of the pulmonary valve sinus can also occur (Figure 1; blue arrows depict anterior pulmonary valve cusp; black arrows depict muscular inclusion of the anterior pulmonary valve sinus), but it is a subtle finding, and can hence be easily overlooked. Nonetheless, it represents a thin-

ning of the pulmonary autograft sinus, and thus constitutes a potential risk factor for autograft dilation after Ross procedure (Video). Although this can be remedied by autograft inclusion into a prosthetic graft, a technique we have previously described in detail,² in this setting good judgement and correct patient selection is required, in order to responsibly utilize this suboptimal pulmonary autograft.

The Video can be viewed in the online version of this article [<https://doi.org/10.1016/j.athoracsur.2021.08.051>] on <http://www.annalsthoracicsurgery.org>.

REFERENCES

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2. Jahanyar J, Munoz DE, Tamer S, El Khoury G, De Kerchove L. The Ross inclusion Dacron graft. *Ann Cardiothorac Surg*. 2021;10:549-551.