Commentary: What can be learned from a case report, or the importance of a well-rounded education

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Central Message

A well-rounded training program that exposes trainees to a breadth of experience may come in handy when coming across a lesion that requires an unusual repair.

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Quadricuspid aortic valves (QAVs) are very rare but have been well described since the early 1970s.[1] Even less recognized but documented is the association of QAVs with a potential congenital structural aortopathy. In the largest series of QAVs to date, 42% of patients had ascending aortic diameters greater than or equal to 4 cm.[2] Most patients with QAVs present with aortic insufficiency, aortic stenosis, or a combination of these. In this issue of the *Journal*, Xu and associates[3] report on a 35-year-old woman who presented with a QAV associated with a ruptured sinus of Valsalva aneurysm. A tricuspidization procedure was performed, with resection of the smaller ruptured right anterior sinus of Valsalva with the associated cusp, with a great clinical outcome. Time will tell whether this will lead to a durable long-term result. Although the technique of tricuspidization is well described in QAVs, it was first applied in truncus arteriosus repair.[4] Information regarding the long-term outcomes after these repairs in truncus arteriosus exists in the congenital literature.[5]

This interesting report underscores the importance of well-rounded surgical training and education, with exposure to complex repair techniques of different acquired and congenital heart pathologies. One simply never knows when the patient will show up who is a great candidate for an unusual repair technique that uses principles that have been described in a totally different setting. This becomes ever more important as trainees are asked to master new technologies or to focus on a niche in adult cardiac surgery to remain competitive in the marketplace. Such subspecialty focus typically occurs at the expense of hands-on time and exposure to congenital heart surgery.

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