LATERAL CAVAL FLAP REPAIR OF ADULT SINUS VENOSUS ATRIAL SEPTAL DEFECT: A NATURAL NOVEL APPROACH

To the Editor:

We read with great interest the contribution by Bajwa and colleagues¹ describing a novel technique for the correction of sinus venosus atrial septal defect with a superior vena caval wall flap. By using this technique, Bajwa and colleagues¹ avoided the use of any synthetic material to close the defect and, as stressed by them, exposure of the left atrium to a nonendothelialized superior vena caval patch. Their accumulated experience in a decade includes 32 patients with a mean age of 48 years and with a mean follow-up of 60 months. Moreover, there were no significant atrial arrhythmias, and there was no need for pacemaker implantation. This is good news when addressing the subset of patients described by Bajwa and colleagues.¹

Even as we congratulate the authors, we would like to discuss the term *novel* as used in the title of this contribution. Our former group described a similar technique forty years ago in this very *Journal*,² addressing the correction of partial anomalous pulmonary venous drainage. This technique was referred to in a subsequent review.³ In this earlier contribution, the technique was used for the correction of 3 types of defect: anomalous pulmonary veins draining in the right atrium, anomalous pulmonary

veins draining in the superior vena cava, and anomalous pulmonary veins draining into the inferior vena cava. Nine patients were initially reported on, and we have repeatedly used this approach in the past decades. The analysis of the figures of both contributions confirms a number of similarities. The conclusions from our earlier work addressed this repair on the same path of simplicity, avoidance of prosthetic material, and offering the left atrium a smooth nonendothelialized surface, trying to avoid embolic phenomena and eventual retraction.

We agree with Bajwa and colleagues¹ that this technique provides a simple solution, especially for the adult population.

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Reply to the Editor:

We are embarrassed that we failed to find and reference an article that

first described the technique for repair of sinus venosus atrial septal defect. We thank Drs Mestres, Murtra, and Revuelta for reminding us of their prior work. We acknowledge that the title of our article should have been "Lateral Caval Flap Repair of Adult Sinus Venosus Atrial Septal Defect: Rediscovery of the Puig-Massana-Murtra-Revuelta Approach." Equally important is that their letter confirms the validity of the concept and the simplicity and efficiency of the technique.

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ENDOSCOPIC AND ULTRASONOGRAPHIC BIOPSY OF PARA-AORTIC MEDIASTINAL LYMPH NODES: A WORD OF CAUTION

To the Editor:

We read with interest the article by Liberman and colleagues¹ presenting a new technique of endoscopic and ultrasonographic access for para-aortic (station 6) mediastinal lymph nodes. In recent years, the advent of ultrasonographic-endoscopic technology has opened fascinating opportunities for aspiration and biopsy of mediastinal lymph nodes through both the esophagus and the trachea, containing the invasiveness for the patients.²⁻⁴ Currently, all mediastinal lymph nodes station excluding the para-aortic (station 6) are accessible by endoscopic or endobronchial ultrasonography. In 2007, Wallace and associates⁵ proposed a transaortic method to reach mediastinal lymph

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nodes and masses, puncturing the medial and lateral wall of the aorta; the risk of this maneuver was high, however, and the procedure did not gain wide clinical application.

In this article, Liberman and colleagues¹ presented the results of biopsies of station 6 lymph nodes performed without traversing the aorta: the needle is passed through the esophageal wall and introduced for 6 to 8 cm toward the para-aortic location, avoiding the aorta and great vessels to reach the nodes that are not visualized when passing the needle into the mediastinum (see the original article for details).

Liberman and colleagues¹ must be congratulated for their skill, dexterity, and boldness in ideating and realizing this procedure. The results are very persuasive, with reported 100% success in reaching and obtaining cytologic material from the station 6 lymph node with no complications in 21 patients.

We believe, however, that it is appropriate to say a few words of caution and to direct the reader's attention to two points. First, the procedure appears very complicated and dangerous, and the excellent results reported by Liberman and colleagues¹ are probably due to a high volume of endoscopic and endobronchial ultrasonographic activity at their center. We must also consider that the indications are very rare (12 cases performed out of 274 combined endobronchial and endoscopic ultrasonographic procedures at their center¹), and the learning curve in a medium-activity center could be very long. Second, are these results widely reproducible? Biopsy of station 6 lymph nodes can also be obtained by single-port video-assisted thoracoscopy. In that case, the specimen is wider (it can undergo all histologic and immunohistochemical studies required), and the procedure is technically easier and can be performed by every thoracic surgeon with a 1- or 2-day hospital stays. Moreover, the risks (both for the patient's great vessels and for the

surgeon's own coronary arteries) associated with passing a needle out in the mediastinum close to great vessels without direct control but only a mental image is avoided.

We conclude by congratulating Liberman and colleagues¹ for the procedure proposed and the results reported. We have some doubts, however, about the reproducibility of their technique and its true advantage relative to easier and safer ways to reach para-aortic lymph nodes, such as a single-port video-assisted thoracoscopy.

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Reply to the Editor:

I thank Baisi and colleagues for their comments regarding our technique for the biopsy of station 6 lymph nodes by using endoscopic ultrasound without traversing the aorta. I would like to respond to the points they brought forward.

First, their point is well taken regarding the complexity of the procedure and the difficulty in reproducing these results in lower-volume centers. Such a concern, however, is not specific to this procedure, as it is well established that high-volume centers typically have superior outcomes to lower-volume centers, especially when it comes to complex procedures. Furthermore, multiple fellows, visiting surgeons, and trainees in our center have been trained in this procedure and are currently using it in their present places of work around the world. I would add that there are many complex procedures that can be construed to be “dangerous” (such as minimally invasive esophagectomy, carinal resection, and lung transplantation) are being performed by thoracic surgeons around the world. In fact, putting a 22-gauge needle through the esophagus to pierce a lymph node that sits on the lateral arch of the aorta is far less “dangerous” than many procedures that we perform on a daily basis.

Second, although I agree that biopsy of station 6 lymph nodes can be obtained by single-port thoracoscopy (or anterior mediastinoscopy), I disagree with the point that these are equivalent procedures to that described in the article. Although these procedures are safe and simple, the endoscopic ultrasound technique described is performed as an outpatient procedure and can be done under local anesthesia and sedation in an endoscopy suite, therefore avoiding general anesthesia, an operating room, and any hospitalization whatsoever. In today's climate of cost-effectiveness in medicine, I believe that a 20- to 30-minute outpatient procedure is far