

Reply

We thank Spodick for reminding us that the word "transmural" is imprecise and ambiguous. We were simply referring to our findings that infarcts characterized electrocardiographically by early ST elevation and the evolution of Q waves, which are classically called "transmural," are those infarctions also frequently associated with reciprocal change. We agree that they do not necessarily involve the full thickness of the left ventricular wall.

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Anomalous Right Superior Vena Cava Drainage to the Left Atrium

The report of Park et al. (1) on anomalous drainage of the right superior vena cava into the left atrium demonstrated technically excellent echocardiographic and radionuclide studies as well as a description of surgical repair. We reported on the use of upper and lower limb echographic "bubble studies" to diagnose this rare condition (2) and subsequently reported this same technique of surgical repair (3). Park et al. did not cite our two papers or that of Tuchman et al. (4).

We consider that the careful use of a nonradiographic technique (echocardiography) is superior to that of radionuclide imaging to reduce the radiation dosage to children. The only justification for radionuclide imaging would be as a replacement for cardiac catheterization.

We should all be cautious when making statements as to the number of previous cases until the ideal computer search system is designed to retrieve them. We would hereby like to add several cases to the references of Park et al. to form what we hope to be a "complete" literature review.

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References

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2. Truman AT, Rao PS, Kulangara RJ. Use of contrast echocardiography in diagnosis of anomalous connection of right superior vena cava to left atrium. *Br Heart J* 1980;44:718-23.
3. Alpert BS, Rao PS, Moore HV, Covitz W. Surgical correction of anomalous right superior vena cava to the left atrium. *J Thorac Cardiovasc Surg* 1981;82:301-5.
4. Tuchman H, Brown JH, Huston JH, Weinstein AB, Rowe GG, Crumpton CW. Superior vena cava draining into left atrium: another cause for left ventricular hypertrophy with cyanotic congenital heart disease. *Am J Med* 1956;21:481-4.

Reply

We thank Alpert and Covitz for calling our attention to another case (4 month old girl) with this interesting congenital anomaly, diagnosed by "bubble studies" and surgically repaired when the

patient was 26 months old. This inadvertent omission from our review was due to the less than ideal computer search system used in our library. We did, by no means, claim our literature review to be complete.

We were well aware of the case report by Tuchman et al., but did not include it in our review because it was a case of persistent left superior vena cava as evidenced by "... extending upward from the cephalic end of the right atrium was a fibrous remnant of the normal superior vena cava." Even Alpert and Covitz stated in their 1981 review that "the case reported by Tuchman is not clearly a case of right [superior vena cava] to the left atrium. . . ."

We disagree that "a nonradiographic technique is superior to that of radionuclide imaging. . . ." The absorbed radiation dose from the use of radionuclide angiography is very small and the technique is widely accepted as a screening procedure for various congenital heart diseases. Quantitation of shunt is also possible with radionuclide studies. We believe both techniques have their own merits and both are noninvasive and easily performed from a peripheral vein. The procedures are feasible in patients of all sizes and ages.

We should all resist the temptation to conclude that one's preferred test is the better test without conducting a properly designed comparative study. The choice of one diagnostic study over the other should also depend on the availability of the technique as well as the expertise at different hospitals.

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Correction

Several lines of copy were inadvertently dropped from the last paragraph on page 1013 of the article, "Transesophageal Two-Dimensional Echocardiography in the Diagnosis of Cor Triatriatum in the Adult" by Michael Schlüter et al. (*J Am Coll Cardiol* 1983;2:101-3).

The corrected paragraph should read:

Hemodynamic and angiographic diagnosis. Preoperative diagnosis of cor triatriatum is usually achieved by cardiac catheterization in conjunction with selective pulmonary cineangiography (4,6-8). Retrograde transmitral catheterization with the recording of a pressure gradient across the left atrial membrane and no gradient between the true left atrium and the left ventricle may be the best way to establish the diagnosis (8), yet this approach is not possible in the majority of patients. Transseptal catheterization, however, will not enable one to distinguish between cor triatriatum and mitral stenosis when the high pressure pulmonary venous chamber is entered. Also, stenosis of the pulmonary veins (20) cannot be excluded when the low pressure antero-inferior chamber is entered. Thus, pulmonary cineangiography, with differential opacification of the two atrial chambers and delayed emptying of contrast medium into the true left atrium, is the definitive invasive means to diagnose cor triatriatum.