

Pulmonary artery catheter detected in the coronary sinus on intraoperative transesophageal echocardiogram. Diagnosis?

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Received: 23 February 2014 / Accepted: 15 April 2014 / Published online: 14 May 2014
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Keywords Pulmonary artery catheter · Coronary sinus · Transesophageal echocardiogram

To the Editor:

A 58-year-old man underwent mitral valve replacement, tricuspid valve repair, and ascending aorta repair.

A pulmonary artery catheter (PAC) was inserted, but transesophageal echocardiography failed to show the PAC in the right atrium: the PAC was traversing an enlarged coronary sinus (Fig. 1). Why? A persistent left superior vena cava (SVC) and agenesis of the right SVC was found.

This is a very rare anomaly: the incidence of persistent left SVC is 0.3–0.5 %, and only 18 % of individuals with persistent left SVC also have right SVC agenesis. In 92 % of cases the persistent left SVC drains into the right atrium via the coronary sinus, causing dilation. Coexistent right SVC agenesis further dilates the coronary sinus because of increased venous return [1].

This condition was not noticed preoperatively. Recognizing systemic venous anomalies is key to avoiding complications during central venous catheterization [2].

This case shows the importance of testing for venous abnormalities by performing contrast-enhanced magnetic resonance or venous angiography when an isolated enlarged coronary sinus is found on echocardiography.

Conflict of interest None.

References

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Electronic supplementary material The online version of this article (doi:10.1007/s00540-014-1838-2) contains supplementary material, which is available to authorized users.

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