

Images in Anesthesia: Transesophageal echocardiogram (TEE) images of an anomalous left circumflex coronary artery.

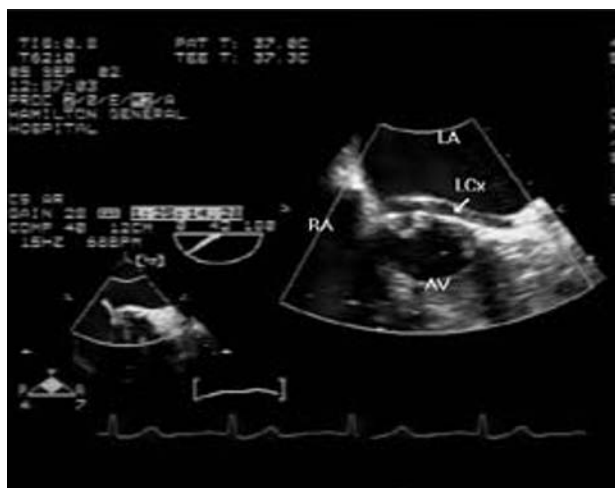


FIGURE 1 Intraoperative transesophageal echocardiogram image of the anomalous left circumflex artery (LCx). Left atrium (LA), right atrium (RA), aortic valve (AV).

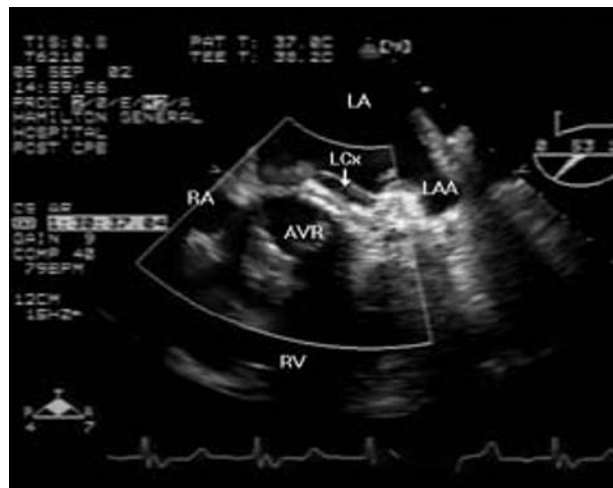


FIGURE 2 Post-AVR transesophageal echocardiogram image of the anomalous left circumflex artery (LCx), showing colour flow Doppler in the vessel. Left atrium (LA), right atrium (RA), left atrial appendage (LAA), right ventricle (RV), aortic valve replacement (AVR).

WE present the transesophageal echocardiogram (TEE) images of a patient with an anomalous left circumflex coronary artery. A 70-yr-old lady with significant aortic stenosis presented for aortic valve surgery. The preoperative angiogram showed an aberrant origin of the left circumflex artery from the right coronary sinus. Following induction of anesthesia with standard routine monitoring, a TEE examination was performed. In the mid-esophageal short axis view of the aortic valve, the abnormal course of the circumflex artery, arising from the right coronary ostium and passing posterior to the aortic valve, was demonstrated (Figure 1).

After aortic valve replacement, TEE examination demonstrated a normal functioning mechanical valve, a colour flow Doppler pattern within the aberrant coronary artery (Figure 2) and no new regional wall motion abnormalities in the myocardium supplied by the circumflex artery, confirming vessel patency.

Anomalous coronary arteries may be identified with TEE.¹ Occlusion of such an anomalous coronary artery can occur during aortic valve replacement by deeply placed sutures or by compression from a prosthetic ring.² Intraoperative TEE may be useful to assess the patency of this vessel after aortic valve surgery.

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References

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- 2 *O'Blenes SB, Feindel CM.* Aortic root replacement with anomalous origin of the coronary arteries. *Ann Thorac Surg* 2002; 73: 647–9.