Anomalous Origin of the Left Main Coronary Artery From the Main Pulmonary Artery in a Young Adult

Chi-Peng Lin, MD; Yen-Po Chen, MD; Tsai-Hsin Chen, MD; Wen-Han Liu, MD; Feng-Sheng Lin, MD; Ming-Jiuh Wang, MD; PhD

A 23-year-old man who had had cardiac murmurs since childhood experienced heart arrest during exercise. Cardiac resuscitation and cardioversion of ventricular fibrillation rescued the patient. Subsequent work-up showed that the patient’s left coronary artery arose from the main pulmonary artery. Transesophageal echocardiography showed aneurysmal dilatation of the left coronary artery, which arose from the posterior aspect of the main pulmonary artery (Figures 1–3). Under hypothermic cardiopulmonary bypass and cardioplegic arrest, the cuff of the left coronary artery orifice was excised and reimplanted into the ascending aorta. The patient was discharged 6 days after the operation.

Figure 1. Multiplane transesophageal echocardiography of the ascending aorta and the main pulmonary artery (short-axis view). The left main coronary artery (LM) with aneurysmal transformation arose from the posterior aspect of the main pulmonary artery (MPA). The orifice of the left coronary artery can be clearly seen (arrow).
Figure 2. Multiplane transesophageal echocardiography of ascending aorta and main pulmonary artery (short-axis view). The enlarged right coronary artery with 2 orifices (small arrows) and the orifices of the left coronary artery (large arrow) are shown.

Figure 3. Multiplane (20°) transesophageal echocardiography of the ascending aorta and the main pulmonary artery. Turbulent flow from the main pulmonary artery through the orifice to the left coronary artery is evident.
Anomalous Origin of the Left Main Coronary Artery From the Main Pulmonary Artery in a Young Adult
Chi-Peng Lin, Yen-Po Chen, Tsai-Hsin Chen, Wen-Han Liu, Feng-Sheng Lin and Ming-Jiuh Wang

Circulation. 2001;104:1575-1576
doi: 10.1161/hc3801.095695

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2001 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/104/13/1575

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/