Left Ventricular Septal Aneurysm
Anne I. Dipchand, MD; Christine Boutin, MD

A 6-month-old girl (3.5 months corrected, born at 28 weeks gestational age) presented with a history of increasing tachypnea, diaphoresis, difficulty feeding, and poor weight gain. A 15-lead ECG done on day 41 of life had revealed normal sinus rhythm with a nonspecific intraventricular conduction delay. At that time, clinically there was a soft systolic murmur and no evidence of congestive heart failure. An echocardiogram revealed a structurally normal heart with a moderate-size patent ductus arteriosus shunting left to right, a small secundum atrial septal defect shunting left to right, and mildly reduced left ventricular function secondary to a dyskinetic interventricular septum (Figure 1). She was discharged clinically well at 3 months of age (corrected age, 40 weeks). On this subsequent presentation, she manifested clinical signs of mild congestive heart failure with tachypnea, fine inspiratory crackles, an intermittent gallop, and a liver palpable at 2 to 3 cm below the costal margin. A chest radiograph revealed moderate cardiomegaly with pulmonary congestion. The ECG revealed normal sinus rhythm with first-degree atioventricular block and nonspecific intraventricular conduction delay. Transthoracic echocardiography revealed an aneurysm of the interventricular septum (Figure 2).

Figure 1. Echocardiogram at 41 days of age (see text). A, Apical four-chamber view demonstrates a normal-size left ventricle without any evidence of aneurysmal dilatation of interventricular septum. On real-time imaging, mild dyskinesis of interventricular septum was demonstrated. B, Parasternal short-axis view demonstrates a normally shaped, nondilated left ventricle. There is normal interventricular septal curvature without obvious thinning or deformation of interventricular septum.

Figure 2. Echocardiogram at 6 months of age (see text). A, Apical four-chamber view demonstrates a wide-mouth aneurysm of mid and apical portions of interventricular septum (arrowheads) without any obvious left ventricular clots. Right ventricular cavity was significantly obliterated by protruding interventricular septum. Ejection fraction by Simpson’s rule was 42%, with preserved contractility of free wall of left ventricle. B, Same ventricular aneurysm is demonstrated in parasternal short-axis view.

From the Division of Cardiology, Department of Pediatrics, the Hospital for Sick Children, and Department of Pediatrics, University of Toronto, Faculty of Medicine, Toronto, Ontario, Canada.

Correspondence to Anne I. Dipchand, MD, Division of Cardiology, Hospital for Sick Children, 555 University Ave, Toronto, Ontario, Canada M5G 1X8.

The editor of Images in Cardiovascular Medicine is Hugh A. McAllister, Jr, MD, Chief, Department of Pathology, St Luke’s Episcopal Hospital and Baylor College of Medicine.

Circulation encourages readers to submit cardiovascular images to Dr Hugh A. McAllister, Jr, St Luke’s Episcopal Hospital and Texas Heart Institute, 6720 Bertner Ave, MC1–267, Houston, TX 77030.
(Circulation. 1998;98:1697.)
© 1998 American Heart Association, Inc.
Left Ventricular Septal Aneurysm
Anne I. Dipchand and Christine Boutin

Circulation. 1998;98:1697
doi: 10.1161/01.CIR.98.16.1697

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/98/16/1697

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/