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 atrioventricular 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.
Left Ventricular Septal Aneurysm
Anne I. Dipchand and Christine Boutin

_Circulation_. 1998;98:1697
doi: 10.1161/01.CIR.98.16.1697
_Circulation_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1998 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/98/16/1697