Huge Intramyocardial Echinococcal Cyst Resulting in a Significant Left Ventricular Cavity Obliteration Evaluated by Real-Time 3-Dimensional Transesophageal Echocardiography and Multidetector Computed Tomography Before and After Complete Excision

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A 13-year-old girl was referred to our hospital with symptoms of dyspnea, palpitations, and faintness. Physical examination was normal and chest x-ray (Figure 1) showed marked cardiomegaly, and an ECG showed T-wave inversion in the D1 and aVL leads. However, transthoracic echocardiography disclosed an echo-free and cystic structure 6 cm in diameter located within the posterolateral myocardial wall segments of the left ventricle and resulting in significant cavity obliteration (Figure-2). Two-dimensional transesophageal echocardiography (TEE; Movie I in the online-only Data Supplement) and real-time 3-dimensional TEE (Movie II in the online-only Data Supplement) confirmed the spherical appearance and thick walls of this huge intramyocardial structure and disclosed suspected echogenic materials within the cyst cavity consistent with active Echinococcus granulosus. Findings identical to those on TEE were also seen on cardiac multidetector (64-slice) computed tomography (Figure 3), but abdominal and cranial tomographic examination was normal and chest x-ray (Figure 1) showed marked cardiomegaly, and an ECG showed T-wave inversion at the location responsible for left ventricular cavity obliteration evaluated by multimodality imaging, including real-time 3-dimensional TEE and multidetector computed tomography before and after complete excision of cyst.

Disclosures

None.

References


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Figure 1. Chest x-ray showed marked cardiomegaly.

Figure 2. A huge cystic intramural structure consistent with echinococcosis resulting in significant cavity obliteration on posterolateral left ventricular wall segments. IVS indicates interventricular septum; Ao, aorta; LA, left atrium; and PW, posterior wall.

Figure 3. Multidetector computed tomography showing findings of an intramyocardial large cyst and left ventricular cavity compression identical to those on transesophageal echocardiography.

Figure 4. Macroscopic appearance of the excised cyst consistent with a hydatid cyst.

Figure 5. Microscopic appearance of the excised cyst consistent with a hydatid cyst.
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