Balkan Med J 2026;43:105-6



# Left Ventricular Cardiac Hydatid Cyst Presenting with Angina Pectoris

Furkan Karahan[1], Cemil Turan[1], Murat Gök[1], Adem Reyhancan[2]

[1]Department of Cardiology, Trakya University Faculty of Medicine, Edirne, Türkiye
[2]Department of Cardiovascular Surgery, Trakya University Faculty of Medicine, Edirne, Türkiye

Echinococcus is a parasitic infection in humans that is endemic in livestock-raising regions. Cardiac echinococcosis accounts for 0.5%-2% of all hydatid disease cases.[1] Since no effective medical treatment for cardiac cysts is currently available, surgical removal remains the standard treatment.[2]

A 58-year-old male patient was admitted to our clinic with chest pain persisting for one week. He lived in a rural village and had raised dogs and cows there since childhood. Physical examination was unremarkable. Electrocardiography revealed T-wave inversion in the anteroseptal leads, while laboratory results were within normal limits. Transthoracic echocardiography (TTE) demonstrated no systolic or diastolic dysfunction. Pericardial effusion was within physiological limits, and a non-specific calcified area was detected at the apex of the left ventricle (Figure 1a). With a preliminary diagnosis of unstable angina pectoris, the patient was hospitalized. Coronary angiography revealed non-obstructive coronary arteries but unexpectedly demonstrated a calcific structure at the left ventricular apex (Figure 1b). This calcification raised suspicion, promoting computed tomography (CT), which identified a smoothly contoured hypodense lesion measuring 3 × 2 cm with diffuse amorphous calcifications along the wall, located in the epicardial fat planes at the apical region of the left ventricle (Figure 1c). Additional CT scans of the abdomen and brain showed no hydatid cysts outside the cardiac region. Surgical excision of the lesion was planned. Albendazole therapy was initiated one month prior to surgery and was scheduled to continue for six months postoperatively. At surgery, an intramyocardial lesion approximately 4 cm in diameter was identified at the left ventricular apex and excised completely (Figure 1d). Pathological examination confirmed the diagnosis of a hydatid cyst. The postoperative course was uneventful. Follow-up echocardiography showed no pericardial effusion. The patient was discharged in stable condition, and no complications were observed during follow-up.

Cardiac hydatid cysts are rare and frequently asymptomatic in their early stages, making clinical suspicion crucial for diagnosis. Echocardiography and CT are the preferred diagnostic tools for evaluating cardiac masses.[3] Familiarity with the imaging spectrum of hydatid cysts aids physicians in establishing timely and accurate diagnoses and in planning appropriate management.[4] Cyst perforation is the most serious complication, leading to anaphylactic shock, thromboembolism, and death in approximately 75% of cases.[1] In the literature, TTE is typically the initial test raising suspicion for cardiac hydatid cysts.[5,6] In our case, however, suspicion first rose from the incidental finding of calcification on angiography, which led to the diagnosis. Moreover, previous reports have shown that cardiac hydatid cysts may cause sudden death.[7,8] For this reason, even asymptomatic cases warrant surgical treatment.

**Corresponding author:** Furkan Karahan, Department of Cardiology, Trakya University Faculty of Medicine, Edirne, Türkiye
**e-mail:** furkankarahaan@gmail.com

**Received:** July 26, 2025 **Accepted:** September 04, 2025 **Available Online Date:** 02.02.2026 • **DOI:** 10.4274/balkanmedj.galenos.2025.2025-7-265
Available at www.balkanmedicaljournal.org

**ORCID iDs of the authors:** F.K. 0000-0003-2824-6072; C.T. 0009-0009-6809-4932; M.G. 0000-0003-3118-9064; A.R. 0000-0002-2576-3835.

**Cite this article as:** Karahan F, Turan C, Gök M, Reyhancan A. Left Ventricular Cardiac Hydatid Cyst Presenting with Angina Pectoris. Balkan Med J.; 2026; 43(2):105-6.

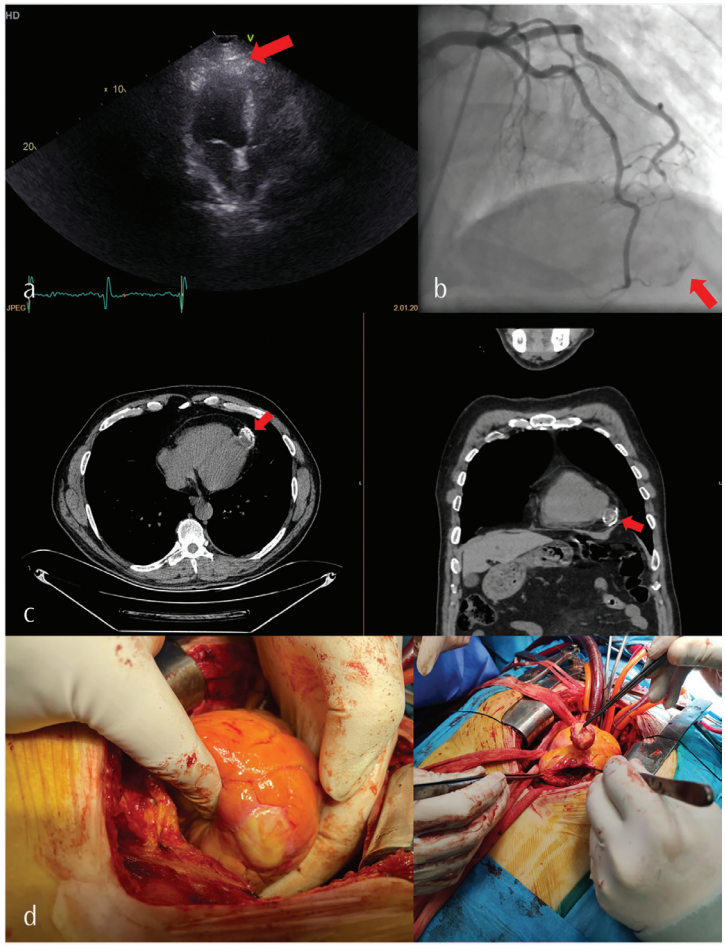


**FIG. 1.** (a) Apical 4-chamber view on initial echocardiographic evaluation. (b) Calcification noted at the apex of the left ventricle on angiographic imaging. (c) Calcified hypodense lesion on computed tomography consistent with cardiac hydatid cyst. (d) An intramyocardial lesion approximately 4 cm in diameter in the apical region of the left ventricle localized lesion was seen, and the lesion was excised.

**Informed Consent:** The informed consent form was provided by the patient to publish this case.

**Authorship Contributions:** Concept- F.K., C.T., M.G., A.R.; Design- F.K., C.T., M.G., A.R.; Supervision- M.G., A.R.; Data Collection or Processing- F.K., A.R.; Analysis and/or Interpretation- F.K.; Writing- F.K., C.T.; Critical Review- M.G., A.R.

**Conflict of Interest:** No conflict of interest was declared by the authors.

## REFERENCES

1. Yaman ND, Sirlak M. Cardiac hydatid cysts-review of recent literature. *J Vet Med Res.* 2017;4:6. [CrossRef]
2. Fennira S, Kamoun S, Besbes B, et al. Cardiac hydatid cyst in the interventricular septum: a literature review. *Int J Infect Dis*. 2019;88:120-126. [CrossRef]
3. Keramida K, Malaxianaki E, Katinioti A, Kliridis P, Trikas A. Advanced lung adenocarcinoma with multiple cardiac masses. *Balkan Med J*. 2024;41:396-397. [CrossRef]
4. Ku L, Ma X. Multimodality imaging assessment of a multi-organ hydatid cyst. *Balkan Med J*. 2025;42:164-165. [CrossRef]
5. Elhaj K, Tayb T, Bafadel A, Omprakash A, Hashmi Z, Bhatnagar G. Right ventricular hydatid cyst in a young adult: a rare case from the UAE. *JACC Case Rep.* 2025;30:104337. [CrossRef]
6. Vahidshahi K, Tahouri T, Farahmandi F, Hekmat M. Large right ventricular hydatid cyst in a child: a case report. *Egypt Heart J.* 2023;75:65. [CrossRef]
7. Lema AS, Habtewold TK, Degefu BT, Sekar SKR, Wendimagegn ST. Sudden death related to an unrecognized solitary cardiac hydatid cyst: a case report and literature review. *IDCases.* 2025;41:e02339. [CrossRef]
8. Mesrati MA, Mahjoub Y, Ben Abdejlil N, et al. Case report: Sudden death related to unrecognized cardiac hydatid cyst. *F1000Res.* 2020;9:286. [CrossRef]