Pericardial cysts are rare congenital malformations formed by an aberrant fusion of the parietal recess during embryogenesis causing its persistence with consequent formation of a pericardial diverticulum. They are located in the cardiophrenic angle in 70% of the cases and comprise an important group of mediastinal cysts. Despite their location, they are benign masses that represent 12 - 18% of primary mediastinal tumors with an estimated incidence of 1/100,000 cases. They are usually asymptomatic lesions, unless they cause any compression on adjacent structures, and are often diagnosed incidentally by imaging tests. The overall estimated prevalence of cardiac neoplasms is 0.001 — 0.03% in studies conducted during necropsy and in pediatric patients cardiac tumors have an incidence of 0.027% — 0.08%. Pericardial cysts are rare entities in both adults and in children. Computed tomography scans present the same attenuation as in unenhanced water after contrast administration. Cardiac magnetic resonance imaging (CMRI) reveals well-defined, homogeneous paracardiac structure with low to intermediate intensity signal in T1-weighted sequences and hyperintense signal on T2 unenhanced on administration of gadolinium. CMRI has been referred to as the best imaging test to characterize the cystic nature of these lesions and is richer in the characterization and evaluation of adjacent structures.

Keywords
Mediastinal Cyst; Pericardium/abnormalities; Echocardiography; Magnetic Resonance Spectroscopy; Diagnostic, Imaging.

Figure 1 – Chest X-ray (PA and profile): oval opaque area in right cardiophrenic angle with corresponding profile image.

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Authors’ contributions

Research creation and design: Geber Jr. JC, Zaramello CR, Pedreira AMSR; Data acquisition: Geber Jr. JC; Data analysis and interpretation: Geber Jr. JC, Zaramello CR, Pedreira AMSR; Manuscript drafting: Geber Jr. JC, Zaramello CR; Critical revision of the manuscript as for important intellectual content: Geber Jr. JC, Zaramello CR, Pedreira AMSR.

Potential Conflicts of Interest

There are no relevant conflicts of interest.

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Academic Association

This study is not associated with any graduate program.

Figure 2 – Cardiac magnetic resonance imaging: paracardiac mass with hyperintense signal on T2 and T1, unenhanced, located in right cardiophrenic recess, measuring 48 x 22 x 26 mm.

References