

signal in T2-weighted sequences and post-contrast enhancement, some showing heterogeneity with necrotic areas. Schwannomas show a hypointense signal in T2-weighted sequences and intense post-contrast enhancement. In contrast, cystadenomas present as a well-defined, usually unilateral, multilocular cystic mass with a hypointense signal in T2-weighted sequences and discrete enhancement^(9,10,13,14).

Solid seminal vesicles lesions are quite rare and have poorly specific imaging characteristics. However, we can rely on the well-established diagnostic parameters of other abdominal solid lesions, such as ovarian and renal tumors, as a line of reasoning for the suspicion of benignity.

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Tatiane Souza Oliveira¹, Dimitrius Nikolaos Jaconi Stamoulis², Luis Ronan Marquez Ferreira de Souza¹, Antonio Carlos Oliveira Meneses¹, Monise Marques Mori¹

1. Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, MG, Brazil. 2. Hospital das Clínicas da Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, MG, Brazil. Mailing address: Dr. Dimitrius Nikolaos Jaconi Stamoulis. Hospital das Clínicas – UFTM. Avenida Getúlio Guaritá, 130, Nossa Senhora da Abadia. Uberaba, MG, Brazil, 38025-440. E-mail: dimitriuss@hotmail.com.

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Pericardial synovial sarcoma: radiological findings

Dear Editor,

An 18-year-old male patient was admitted to the hospital with a 15-day history of cough and fatigue. Cardiac auscultation revealed muffled heart sounds. A chest X-ray obtained at admission showed an increase in the cardiac silhouette and moderate pleural effusion on the right. An echocardiogram was performed, which demonstrated a significant pericardial effusion with signs of diastolic restraint and a rounded, hypoechoic mass with regular contours, measuring 3.6 × 3.9 cm, located posterior to the right atrium. The patient underwent pericardiocentesis, with analysis of the fluid collected. Computed tomography (CT) of the chest and cardiac magnetic resonance imaging (MRI) were requested. The chest CT (Figures 1) revealed a solid, heterogeneous mass with contrast enhancement in the posterior portion of the pericardial sac, associated with pericardial effusion and pleural effusion. In the cardiac MRI (Figure 2), a solid mass with a heterogeneous content measuring 3.2 × 6.1 × 3.9 cm was observed in

the posterior portion of the pericardial sac, with adhesion points and significant heterogeneous contrast uptake (as determined by the delayed enhancement technique), as well as pericardial inflammation. Based on the imaging findings suggestive of neoplasia and the inconclusive pericardial fluid cytologic findings, we decided to perform surgical resection of the mass. The histopathological examination of the surgical specimen resulted in a diagnosis of synovial sarcoma. After one month of hospitalization, the patient was discharged to oncology outpatient follow-up.

Cardiac MRI has taken on an ever-increasing role in the study of cardiovascular diseases⁽¹⁻⁴⁾. Pericardial synovial sarcoma is a primary malignant tumor of the pericardium that is histologically similar to the synovium and originates from mesenchymal cells⁽⁵⁾. It is an extremely rare disease, the exact prevalence of which remains unknown, with a slight predilection for young males⁽⁶⁾. The symptoms range from none to pericardial effusion with cardiac tamponade, dyspnea, fever, weight loss, and embolic phenomena⁽⁷⁾. Although the prognosis for pericardial synovial sarcoma is poor, some patients may benefit from

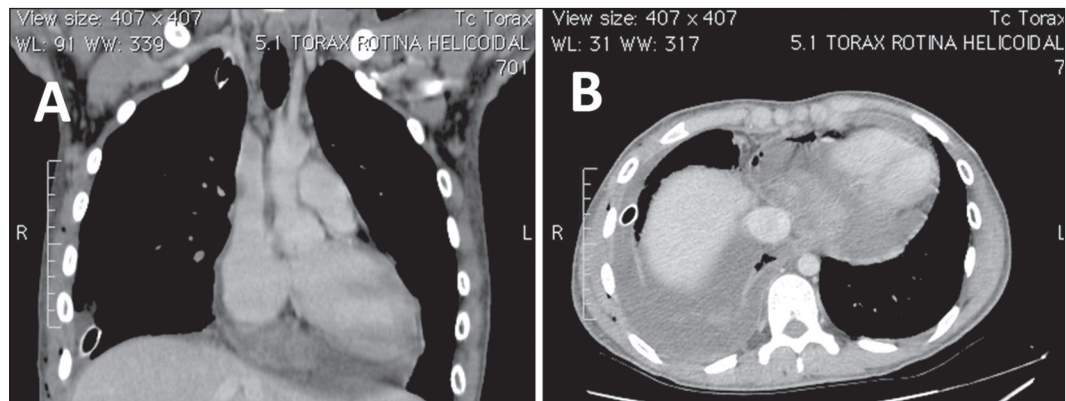


Figure 1. Contrast-enhanced chest CT. Coronal (A) and axial (B) slices in a mediastinal window, showing a solid heterogeneous mass with contrast enhancement in the posterior portion of the pericardial sac associated with pericardial effusion and pleural effusion on the right, together with pleural drainage.

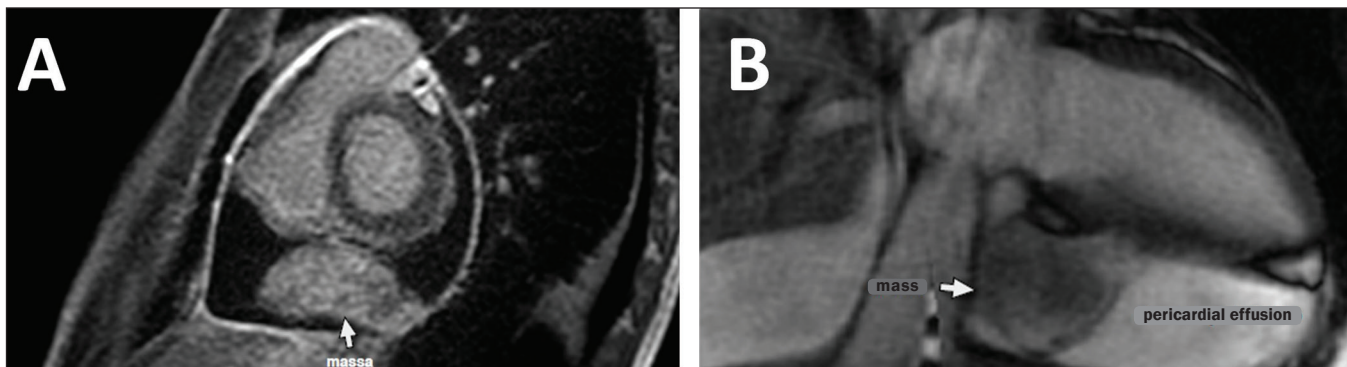


Figure 2. Cardiac MRI with delayed enhancement, in short-axis and long-axis views (**A** and **B**, respectively), showing a solid mass with a heterogeneous content, measuring $3.2 \times 6.1 \times 3.9$ cm, in the posterior portion of the pericardial sac with adhesion points, with significant heterogeneous contrast uptake (as determined by the delayed enhancement technique), as well as pericardial inflammation.

surgical resection and radiotherapy, with or without chemotherapy^(8,9). In asymptomatic patients, the working diagnosis is based on incidental findings of lesions in cardiac imaging, whereas it is based on the findings of directed imaging tests in symptomatic patients; in either case, the diagnosis can be confirmed only through histopathological analysis^(6,8).

Although the tumor image is nonspecific on the echocardiogram of an individual with pericardial synovial sarcoma, it is fundamental for the initial detection of the disease, quantification of the pericardial effusion, evaluation of cardiac function, and evaluation of cardiac restraint, as well as allowing comparative analysis with sequential follow-up examinations⁽¹⁰⁾. A solid, heterogeneous mass, with multilocular areas⁽¹¹⁾ and internal septa, is observed on CT and MRI; in some cases, there is invasion of adjacent structures, pericardial effusion and foci of metastases. Cardiac MRI is considered the best modality for the detection and characterization of pericardial synovial sarcoma, because it makes it possible to observe the degree of vascularization, to better detail the cardiac invasion, and to monitor the post-treatment evolution^(10,12). In this context, it can be concluded that, although the imaging tests do not confirm the diagnosis, they play a fundamental role in the detection and characterization, as well as in the preoperative and postoperative planning, of pericardial synovial sarcoma.

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Diogo Costa Leandro de Oliveira¹, Eduardo Oliveira Pacheco¹, Larissa Teixeira Ramos Lopes², Claudio Calazan do Carmo³, Alessandro Severo Alves de Melo⁴

1. Universidade Federal Fluminense (UFF), Niterói, RJ, Brazil. 2. Hospital Niterói D'Or, Niterói, RJ, Brazil. 3. Grupo Oncologia D'Or, Niterói, RJ, Brazil. Mailing address: Dr. Alessandro Severo Alves de Melo. Hospital Universitário Antonio Pedro. Rua Marques de Paraná, 303, 2º andar, Centro. Niterói, RJ, Brazil, 24033-900. E-mail: alesevero@gmail.com.

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Papillary tumor of the pineal region accompanied by Parinaud's syndrome: magnetic resonance imaging findings

Dear Editor,

A 22-year-old male patient presented with a nonpulsatile, diffuse headache of moderate-intensity, with no aura or other associated symptoms. In the neurological exam, he presented paralysis of the vertical conjugate gaze with fixed downward glance, bilateral eyelid retraction, insufficiency of ocular convergence, pupils nonreactive to light, and preserved pupillary reaction to accommodation, characterizing Parinaud's syndrome. Magnetic resonance imaging (MRI) showed an expansive lesion in the pineal region, with a discrete hyperintense signal in T1-weighted

sequences and isointense in T2-weighted sequences, with cystic areas of diffusion, a discrete hyperintense signal in the diffusion, and marked gadolinium enhancement (Figure 1). The lesion caused compression of the cerebral aqueduct and dorsal midbrain, as well as causing hydrocephalus. Histopathological analysis demonstrated a papillary neoplasm composed of cuboidal cells, with an epithelial appearance, arranged on fibroconnective stromata, with evident vascularization, and mitotic activity (4 mitotic figures per 10 high-power fields). Immunohistochemical analysis showed marked positivity for cytokeratins and for S-100 protein, together with negativity for neurofilament proteins. These findings are consistent with a papillary tumor of the pineal region (PTPR).