

A RARE CASE OF PANCREATIC CANCER METASTASIS IN THE RIGHT VENTRICLE OF THE HEART

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Background

Cardiac metastasis, although rare, are more common (2,3%- 18,3%) than primary cardiac tumors (0,001%- 0,28%). The heart can be metastasised mainly by melanoma, lymphoma, breast and lung cancer but extremely rarely by pancreatic cancer which spread in epicardium and myocardium. We present the case of a patient with metastasis in free wall of right ventricular by primary pancreatic cancer.

Case

A 85 years old female, with medical history of hypertension, heart failure with preserved ejection fraction, dyslipidemia and hypothyroidism, was examined in the emergency department due to the discovery of a right ventricle mass in the echocardiogram in a routine test.

Discussion

The electrocardiogram of the patients showed sinus rhythm with premature ventricular complexes. In the transthoracic echocardiogram was found hyperechogenic mass located to the apical and the free wall of the right ventricle which was hyperdynamic and with normal dimensions. The differential diagnosis of the mass included the malignant tumor (primary or metastatic), benign tumor and thrombus. The laboratory results indicated extremely high value of cancer antigen 19-9 >10,000 (normal value <34U/ml). The 24 hours Holter monitor showed premature atrial complexes 1%, ventricular 2%, without episodes of atrial fibrillation. The thoracic and abdomen computed tomography showed hypodense lesion which caused important stretching of the common bile duct and the pancreas duct. In cardiac magnetic resonance imaging was found the sizable mass in the right ventricle apex which penetrated the ventricular free wall with high signal intensity on late gadolinium enhancement with necrosis. These findings were compatible with malignant

tumor metastasis. The biopsy through the endoscopic retrograde cholangiopancreatography established the diagnosis of the pancreatic adenocarcinoma.

Conclusion

The importance of this patient case based in the rarity of cardiac metastases and especially in the right ventricle. Diagnosis is challenging since cardiac metastases are often clinically silent, and need a multimodality approach imaging.

