Massive pericardial cyst in an athlete

Cisto pericárdico volumoso em atleta

Anderson Ferreira Leite¹, Igor Ferreira Sales¹

DOI: 10.5935/2238-3182.20140113

ABSTRACT

Tumors and cysts are rare in the heart. This report presents the evolution of a pericardial cyst with an atypical radiographic aspect. The diagnosis was suggested by a transesophageal echocardiography and chest CT scan and confirmed after thoracotomy and anatomopathological study in an athlete with significant cardiac decompensation and remission after surgery.

Key words: Mediastinal Cyst; Heart Failure; Thoracic Surgery.

RESUMO

Tumores e cistos do coração são raros. Este relato apresenta a evolução de cisto pericárdico com aspecto radiográfico atípico. O diagnóstico foi sugerido pelo ecocardiograma transesofágico e tomografia computadorizada de tórax e confirmado após toracotomia e estudo anatomopatológico em atleta com descompensação cardíaca significativa e remissão após intervenção cirúrgica.

Palavras-chave: Cisto Mediastínico; Insuficiência Cardíaca; Cirurgia Torácica.

INTRODUCTION

Tumors and cysts of the heart and pericardium are rare.¹ They are essentially congenital defects with an incidence estimated at 1:100,000, accounting for 6-7% of all mediastinal masses.²,³ The majority of cases are asymptomatic and usually diagnosed incidentally by chest x-ray. Their symptoms may present as dyspnea and chest pain in addition to complications such as cardiac tamponade, which justifies the need for rapid diagnosis and appropriate approach to preventing death.

This report describes a healthy athlete, with cardiac decompensation due to the compression of a large pericardial cyst and who underwent surgical treatment.

CASE REPORT

A 40 year old man, bodybuilder, user of warfarin due to deep vein thrombosis, sought emergency medical care due to progressive dyspnea and dry cough associated with small efforts. The symptoms inception took place three months prior to the consultation, having been subjected to a transthoracic echocardiographic study without diagnostic elucidation. The examination showed signs of systemic and pulmonary con-
Massive pericardial cyst in an athlete

The patient was submitted to thoracotomy due to hemodynamic alterations, with complete excision of the mediastinal mass, with its histopathological analysis confirming the pre-operative suspicion of a large pericardial cyst measuring 10 x 3 x 0.3 cm, with fibrous wall filled with fibrin-hemorrhagic old liquid. Discharge occurred five days after surgery with uneventful postoperative.

The post-surgery transesophageal echocardiography (Figure 3) recorded thickened pericardium, improvement in the biventricular function (left ventricular ejection fraction = 64%), however, a respiratory variation of the tricuspid flow persisted, indicating some degree of hemodynamic involvement.

In the two months follow-up, the patient showed complete symptoms remission.

DISCUSSION

Pericardial cysts are unusual congenital anomalies that occur almost exclusively in adults in the fourth and fifth decades of life. They are caused by defects in the development of the celomic cavity, being adhered to the pericardial leaf, although communication with the pericardial cavity happens only in a minority of cases. The cysts vary in diameter from 2 to 5 cm or more and represent 6% of all mediastinal masses and 33% of mediastinal cysts; most cases are asymptomatic and diagnosed incidentally by thorax x-ray. They rarely calcify or rupture. Acquired cysts are extremely rare and may be associated with a mediastinal neoplasm, parasitic infection, traumatic disease, or cardiac surgery.
CONCLUSION

Pericardial cysts are rare, usually asymptomatic and incidentally diagnosed. They may manifest chest pain, dyspnea or paroxysmal tachypnea, cough, and palpitations. In this reported case, the cyst caused hemodynamic repercussion with signs of acute heart failure. Imaging methods provide diagnostic information and help define the proposed therapy, which can be from conservative to surgical resection.

REFERENCES