Aneurysm left atrial appendage

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Abstract

Aneurysms of the atrial appendages are rare and extremely rare clinical entities. It can be confused with pericardial cyst, coronary artery aneurysm, left ventricular pseudo-aneurysm and partial or complete congenital absence of the pericardium. Usually clinically asymptomatic, diagnosed as incidental finding by the presence of heart murmur or cardiomegaly on chest radiograph, it can also manifest in the presence of supraventricular arrhythmias or systemic embolism. The treatment of this pathology makes aneurysmectomy. For 3-year preschool heart murmur and echocardiographic finding of insufficiency Mitral and aneurysmal dilation of the left atrial appendage it is presented.

Keywords

Aneurysm, Atrial appendage, Echocardiography, Cardiac murmur

Imprint

Cindy Guignan, Francys Guerra, Cristian Ramirez. Aneurysm left atrial appendage; Cardiometry; No.10 May 2017; p.77–79; DOI:10.12710/cardiometry.2017.10.7779; Available online: www.cardiometry.net/issues/no10-may-2017/aneurysm-left-atrial-appendage

CASE REPORT

Submitted: 7.1.2017, Accepted: 9.2.2017, Published online: 25.5.2017

DOI: 10.12710/cardiometry.2017.7779

Clinical case

Preschool female 3 years old, asymptomatic cardiovascular, who was heart murmur auscultation as incidental finding. When R1 single physical examination, breath holosystolic I / VI mitral area radiating to the armpit, physiological split S2, R3 and R4 not.

Chest X-ray

Chest PA

ICT: 0.63. Right edge, with double contour image, vascular image in the left edge of cardiac silhouette.

Lateral left thorax

Retrocardiac space occupied in three thirds compressing the barium column due to growth of AI and VI.

Transthoracic echocardiography

1. aneurysmal dilation of the left atrial appendage.
Operative findings
Under Cardiopulmonary Bypass. Aneurysmal base level of the left atrium of approximately 8x6 cm dilation. Appendage of normal size and shape. Left atrial aneurysmectomy was performed to find healthy tissue resection 3 mm from the mouth of the left pulmonary veins and 4 mm mitral ring in the anterior segment, then placing an autologous pericardial patch.

With satisfactory evolution after surgery.

Discussion
Aneurysms of the atrial appendages, are rare and extremely rare clinical entities. But there can be confused knowledge about the disease with other conditions such as pericardial cyst, coronary artery aneurysm, left ventricular pseudo-aneurysm and partial or complete congenital absence of the pericardium [1].

Historically in 1938, Semans and Taussig, reported the saccular dilation of the left atrium in a girl of 5 years with dextrocardia, without involving the appendage. In 1962, Parmley reported dilation of the left atrial appendage 2 children, a 11 year old patient who presented with atrial arrhythmia and two episodes of systemic embolism, and a second patient 7 years old, with an aneurysm of the atrial appendage left associated with a congenital anomaly of the left renal artery [2].

In 1963, Williams reported a case of dilatation of the wall of the left atrial appendage in a 27 years old. Subsequently they cited several articles which show the presence of aneurysmal dilation of the atrial appendage [3].

In 1999, Zhao and colleagues reported the case of a 27 year old with an aneurysm of the left atrial appendage, which was removed in 1996 without cardiopulmonary bypass, approached by lateral thoracotomy [2].

Among the etiologies of this pathology are mentioned which may be congenital or acquired causes, among the causes acquired history of chest or secondary trauma is a mitral valve disease and among congenital causes congenital dysplasia pectineus or muscle due to pericardial defects [3, 4])

These congenital aneurysm of the left atrium may be extrapericardicos or intrapericardial. The extrapericardial type is associated with defects of the pericardium through which the atrial appendage or any portion of the left atrium hernia. Intrapericardial type is always associated with an intact pericardium [5].

Morphologically it can also be due to dysplasia pectineus bands or the presence of connection on the handset or weakness in the wall of the atrial appendage [4].

Clinically observed in patients with normal, asymptomatic phenotype, which are diagnosed as incidental finding by the presence of heart murmur during a physical examination, presence of cardiomegaly on chest radiograph, arrhythmias, usually supraventricular tachycardia, due to the significant expansion of the left atrium, dyspnea, symptoms of congestive heart failure or left chest pain. Other manifestations include the generation of systemic embolisms produced inside the dilated atrium [3, 6–8].

The diagnostic approach to this condition can be done in as first tool chest radiograph which is evidenced an increase in the upper left border of the cardiac silhouette as an incidental finding, echocardiography as initial study for the diagnosis of this disease, where evidence the presence of the aneurysmal portion, also studies Cardiac Magnetic resonance tomography or to define the image and discard if it is other clinical entities (see Figures 1–4) [4, 7, 9].

Treatment of this condition is surgical aneurysmectomy made with reconstruction of the atrium under extracorporeal circulation [10]. In other patients with arrhythmogenic foci Maze procedure is used. However arrhythmias in most patients tend to disappear in the immediate postoperative period. [4, 11, 12].
Statement on ethical issues
Research involving people and/or animals is in full compliance with current national and international ethical standards.

Conflict of interest
None declared.

Author contributions
The authors read the ICMJE criteria for authorship and approved the final manuscript.

References