### IMAGEM EM CARDIOLOGIA

## An unusual aortic valve mass [36]

CATARINA S. SOUSA<sup>1</sup>, NUNO BANASOL<sup>2</sup>, DANIELA AFONSO<sup>2</sup>, EUGÉNIA PINTO<sup>2</sup>, LORETE CARDONA<sup>2</sup>, LUÍSA BRANCO<sup>2</sup>, ANTÓNIO ARSÉNIO<sup>1</sup>

<sup>1</sup>Centro Hospitalar Lisboa Norte - Hospital Pulido Valente, Lisboa; Portugal <sup>2</sup>Centro Hospitalar Lisboa Central Hospital de Santa Marta, Lisboa, Portugal

Rev Port Cardiol 2011; 30 (04): 453-455

Uma massa estranha na válvula aórtica

Key words Cardiac papillary fibroelastoma Palavras-Chave Fibroelastoma papilar cardíaco

#### CASE REPORT

A 55-year-old woman was referred by her family physician for a transthoracic echocardiogram in our echocardiography laboratory as a part of routine screening.

Her past medical history and physical examination were unremarkable.

The transthoracic echocardiogram revealed a mobile mass adjacent to the aortic valve on the aortic side (*Figure 1-A* – *parasternal short-axis view*, and *Figure 1-B*, – *parasternal long-axis view*). The aortic valve had normal function and no other masses were noted. Due to the patient's poor acoustic window a transesophageal echocardiogram was performed to further assess the mass's attachment and characteristics.

The mass was round and echodense (21x10

mm), with well defined borders, pedunculated and attached to the commissure between the noncoronary and right coronary cusps, suggestive of a fibroelastoma (*Figure 1-C - 120*°, *Figure 1-D - 45*°, and *Figure E - 45*°).

Because of the tumor's size and location and the possibility of further enlargement, the patient was referred for elective cardiac surgery.

A valve sparing technique was used. A 20x10 mm mass was extracted with a gelatinous and frond-like appearance (*Figure 1-F*). Off bypass a moderately eccentric regurgitant aortic valve jet was noted on color Doppler (between the noncoronary and right coronary cusps), prompting aortic valve replacement with a St. Jude 19 mm mechanical prosthetic valve.

The patient's recovery was uneventful.

The histopathological examination revealed a cardiac papillary fibroelastoma (*Figure 1-G*).

453



Figure. 1-A, 1-B, 1-C, 1-D, 1-E, 1-F, 1-G

#### DISCUSSION

Primary cardiac tumors are rare and in 75% of cases benign. Papillary fibroelastoma is the third most common primary cardiac tumor, after myxoma and fibroma. Commonly attached to the aortic or mitral valve (less frequently to the right side cardiac valves), it can be asymptomatic but can also present with systemic embolization or recurrent pulmonary edema due to flow obstruction.

Advances in echocardiography with improved resolution have enabled the recognition of small, poorly defined valvular lesions that were not identified previously.

Due to the possibility of embolization or e-mail: sousa.cat@gmail.com

obstruction, surgical excision should be performed in symptomatic patients, in those undergoing cardiac surgery, and with large and extremely mobile fibroelastomas.

Pedido de Separatas Address for reprints:

Catarina Sousa Serviço de Cardiologia - 2 Hospital Pulido Valente Alameda Linhas Torres - 117 1769-001 Lisboa - Portugal Tel. 217 548 000 e-mail: sousa.cat@gmail.com

454

#### **BIBLIOGRAFIA / REFERENCES**

1. Jallad, N; Parikh, R; Daoko, J; Albareqdar, E; Al-Dehneh, A; Goldstein, J; Shamoon, F; Connolly, M. Concurrent primary cardiac tumors of differing histology and origin. Tex Heart Inst J. 2009; 36(6):591-3.

2. Sun, J; Asher, C; Yang, X; Cheng, G; Scalia, G; Massed, A; Griffin, B; Ratliff, N; Stewart,W; Thomas, J. Clinical and echocar-

diographic characteristics of papillary fibroelastomas. Circulation. 2001;103:2687-2693.

3. Bicer, M; Cikirikcioglu,M; Pektok,E; Muller, H; Dettwiler, S; Kalangos,A. Papillary fibroelastoma of the left atrial wall: a case report. J Cardiothorac Surg. 2009;4:208.

# Reunião Anual do Grupo de Estudos de Ecocardiografia

## 28 e 29 de Outubro de 2011