An Unusual Cause of Cerebral Ischemia in the Elderly: Left Atrial Myxoma

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An Unusual Cause of Cerebral Ischemia in the Elderly: Left Atrial Myxoma

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**Abstract**

Intracardiac primary tumors are rare conditions. The 75% of them are benign, the 25% malign and approximately 50% are myxomas in adults. About 75% of atrial myxoma arise in left atrium, while right atrial myxomas occurring only in the 15-20% of all cases as discussed elsewhere [1-3]. The symptoms are atypical and highly variable, often they may remain asymptomatic as discussed by Yuce [4]. According their size, mobility and location, myxomas may present lung congestion, syncope, sudden death due to thrombo - embolic phenomenon, while exertional dysnea, syncope or sudden death are caused by valve obstruction, as discussed elsewhere [1, 5, 6-7]. It has been reported by Uner and Lee, that neurologic complication are associated with cardiac myxoma in the 26% to 45% of patients with cerebral embolic infarct being the most frequently event observed [8-9]. Furthermore constitutional symptoms like fever, weight loss, arthralgias, Raynaud’s phenomenon, anaemia, hypergammaglobulinemia, elevated erythrocyte sedimentation rate are related to the production of interleukin 6 as discussed by Kanda [10]. 5% of patients with cardiac myxoma may moreover show the simultaneous presence of multiple genetical disorders. This clinical condition is known as “Carney Complex”. The clinical manifestation of this syndrome could present skin pigmented abnormalities (lentigines or blue nevi), multiple cardiac myxomas at a young age, endocrine tumors, endocrine overactivity, less frequently schwannomas, or multiple myxomas involving breast, skin, oropharynx or female genital tract as discussed elsewhere[11-12]

Echocardiography is the standard diagnostic technique and the surgical removal is the recommended therapy, as is it usual curative, as discussed by Reynen [2].

**Introduction**

A 76 years old male was admitted to our hospital on March 2005 for acute cerebral ischemia. He was suffering from hypertension, diabetes, chronic cerebral vascular disease. He underwent about 15 years ago aortic-femoral arteries bypass and left carotid artery endoarteriotomy. During the examination the patient presented with a systolic blood arterial pressure of 140 mmHg and a diastolic of 80 mmHg, normal heartbeat, with a mitralic 3/6 Levine systolic murmur. He presented skin pigmented abnormalities. Electrocardiogram was normal. Laboratory data was within normal limits. Chest X-ray was normal. Cerebral tomography revealed a severe hypodensity in the right cortical-subcortical area related to acute ischemia (figure 1). Routine transthoracic echocardiogram revealed a giant echogenic pediculated left atrial mass (10 cm x 5 cm), arising to the base of interatrial septum prolapsing through the mitral valve into the left ventricle during diastole (figure 2). Stabilizing patient’s clinical conditions, the mass was surgically removed. The pathologic analysis confirmed the echocardiographic suspect of myxoma (figure 3)

At the three months follow-up echocardiographic examination was normal. Magnetic cerebral resonance showed a chronic ischemic disease and at the clinic evaluation the signs of cerebral ischemia persisted with a left emiparesis. Genetic evaluation wasn’t performed because of the patient’s refusal.

**Case Report(s)**

This clinical case emphasizes the importance of cardiac evaluation in case of stroke in the elderly. Atrial myxomas are rare, often asymptomatic. Myxoma is a rare case of stroke. Neurologic complications are associated with cardiac myxoma in same patient with myxoma and when they occur, frequently present with cerebral infarction. Stroke is due to cerebral embolism of the left atrial mass. The mobility not the size of the myxoma appears to be related to embolic potential. In this case diagnosis was occasionally made by routine transthoracic echocardiogram. Ecocardiography provided a good detection of the massa and was helpful to surgery planning.

**Discussion**

Neurologic complication can be the initial
manifestation of atrial myxoma in the elderly. Prompt diagnosis is of significance to prevent recurrent complications.

In case of stroke and peripheral embolism, a cardiologic examination is important and transthoracic echocardiogram is necessary to exclude a cardiac myxoma.

**Conclusion**


**References**

Illustrations

Illustration 1

Basal cerebral tomography revealed a severe hypodensity in the right cortical-subcortical area related to acute ischemia

Illustration 2

Transthoracic echocardiogram reveals the presence of a hyperechoic mass into the left atrium. RA right atrium, LA Left atrium, RV right ventricle, LV Left ventricle
Illustration 3

Myxoma. To remark the presence at the surface of the mass of small mobile size parts highly embolic
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