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Research Letter

Lipomatous hypertrophy of the interatrial septum and cerebellar cavernous angioma: A dangerous association

Dear Editor,

Lipomatous Hypertrophy of the Interatrial Septum (LHIS) was first described by Prior in 1964.[1] LHIS is a rare, benign disorder characterized by a lipid accumulation of the interatrial septum.[2] The incidence of LHIS is reported to be 2.2%,[3] but is likely to increase in relation to the growing usage of non-invasive imaging techniques. Generally LHIS is not clinically apparent, but in some cases it may cause congestive heart failure and various arrhythmias, especially atrial fibrillation. The choice of treatment of LHIS is controversial. Surgical management should be considered in patients with severe obstruction in the superior vena cava or right atrium. Anticoagulation therapy is mandatory in case of atrial fibrillation. On other hand, Cerebellar Cavernous Angioma (CCA), also known as cerebral cavernous malformations, is relatively rare entity. The presenting signs and symptoms vary according to the anatomical location.[4] Spontaneous rupture and intracranial hemorrhage represents a potentially devastating complication and anticoagulation therapy is generally contraindicated in this setting of patients. A 64-year-old female patient was referred to our clinical Center following the onset of exertional dyspnea and palpitations. She had received the diagnosis of cerebellar cavernous angioma ten years ago [Fig. 1]. Moreover the patient had a medical history of arterial hypertension. Her clinical examination revealed arrhythmic heart sound and a grade 1/6 apical systolic murmur. Electrocardiogram revealed atrial fibrillation with rapid ventricular response (heart rate ranging from 140 to 160 beats/min.). A transthoracic echocardiogram revealed a mild mitral regurgitation and hypertrophy of left atrial septum with a hyperechogenic mass inside [Fig. 2A]. A transeosophageal echocardiography confirms the echogenic dumbbell-shared hypertrofic of left atrium (about 2 cm) [Fig. 2B]. Lipomatous hypertrophy of interatrial septum was suspected and a cardiovascular magnetic resonance imaging (MRI) was performed to confirm the diagnosis and better characterize the lesion. Diagnosis was confirmed by cardiac MRI and the fatty nature of the mass was defined [Fig. 2C].

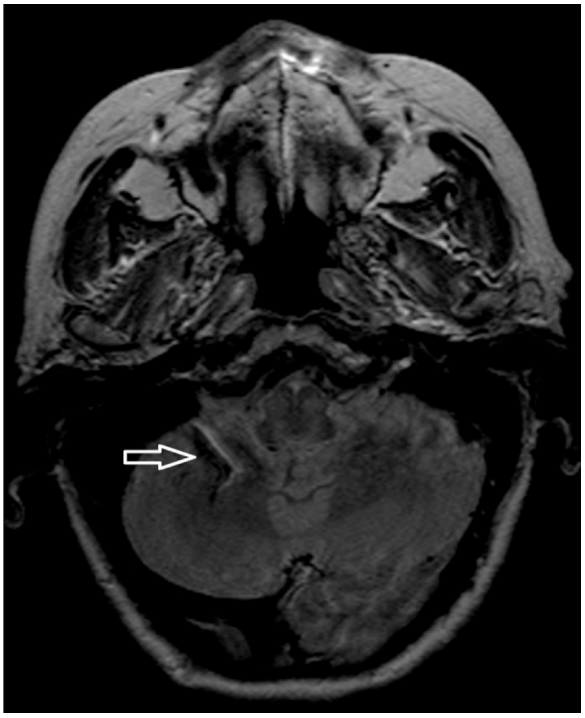

Fig. 1. Axial non-contrast T2-weighted head MRI showed cavernous angioma in the right cerebellar hemisphere (arrow).

The patient had a CHA_2DS_2VASC score of 2, which translates moderate-high risk of stroke/TIA/systemic embolism. However she was ineligible for anticoagulation therapy for high risk of intracerebral bleeding. We decided to start a prophylactic antiarrhytmic agent (amiodarone 200 mg/die). The patient remained asymptomatic and sinus rhythm after one year of follow-up.

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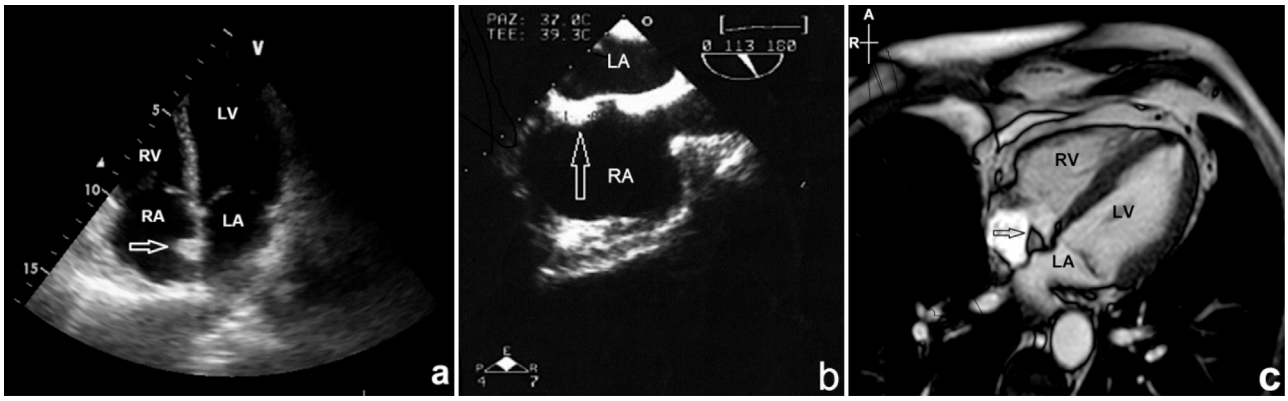

Fig. 2. Cardiac integrate imaging: **a.** Transthoracic echocardiogram showed hyperechogenic mass in the inteatrial septum (arrow). **b.** Transesophageal echocardiographic view at the upper esophageal level showed thickening of the interatrial septum (arrow). **c.** Cardiac MRI confirmed the diagnosis of LHIS (arrow).LV indicates left ventricle; RV, right ventricle; LA, left atrium; RA, right atrium.

Conflict of interest

The authors report no relationships that could be construed as a conflict of interest.

Acknowledgment

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References

1. Prior JT. Lipomatous hypertrophy of cardiac interatrial septum Alesion resembling hibernoma, lipoblastomatosis and infiltrating lipoma. *Arch Pathol*. 1964;78:11–15.
2. Xanthos T, Giannakopoulos N, Papadimitriou L. Lipomatous hypertrophy of the interatrial septum: a pathological and clinical approach. *Int J Cardiol*. 2007;121:4–8.
3. Heyer CM, Kagel T, Lemburg SP, Bauer TT, Nicolas V. Lipomatous hypertrophy of the interatrial septum: a prospective study of incidence, imaging, findings, and clinical symptoms. *Chest*. 2003;124:2068–2073.
4. Takahashi A, Kamiyama H, Abe H, Kuroda S, Imamura H, Saitoh H. Cavernous Angioma of the cerebellum and cerebellar atrophy. *Neurol Med Chir (Tokyo)*. 1992;32:762–764.

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