University Journal of Medicine and Medical Specialities

ISSN 2455- 2852 2018, Vol. 4(1)

A CASE OF LEFT ATRIAL MYXOMA PRESENTING AS CARDIO-EMBOLIC STROKE

GOWRIPATHY
Department of General Medicine,
MADURAI MEDICAL COLLEGE AND HOSPITAL

Abstract :

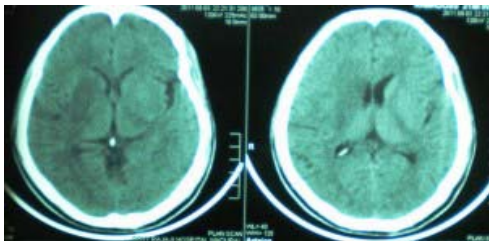
We report the case of a young male who presented with left hemiplegia due to one of the rare cause of cardioembolic stroke. Clinical features and imaging studies showed ischemic infarction. Echo revealed left atrial myxoma.

Keyword :left atrial myxoma , cardioembolic stroke,young stroke

CASE REPORT:

A 21 year old man was admitted in our ward with sudden onset weakness of left upper an lower limb for past 3 days . He developed focal seizures, upper motor neuron lesion of seventh nerve palsy and loss of consciousness. No bladder or bowel disturbances. He was not a alcoholic . He had no substance abuse . Family history was not relevant.

On examination patient was unconscious. His radial pulse was absent on left side . All other peripheral pulses were normal . His blood pressure was normal. On central nervous system examination patient had left hemiplegia with VII cranial nerve palsy , other systemic examination were normal.

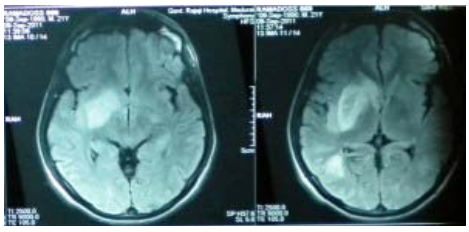


CT BRAIN showing ischemic infarct in right MCA territory

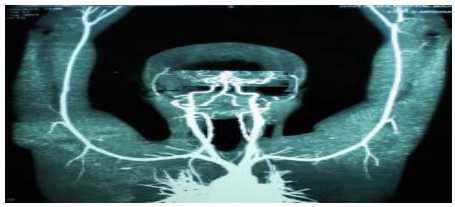
CT Brain showed ischemic infarct in right MCA territory . MRI Brain with MRA and MRV revealed subacute ischemic infarct of M1 segment of right MCA territory. ECHO showed large mobile pedunculated mass 3.8x 4cm in the left atrium attached to IAS and prolapsing into left ventricle through mitral valve – suggestive of left atrial myxoma

His haemogram ,coagulation profile, lipid profile, blood sugar , renal and liver function tests CRP and ESR were normal . ANA , APLAS , VDRL, HIV were negative. Serum homocysteine was normal . Chest x ray and ECG were normal .

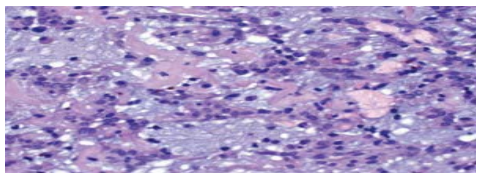
Carotid Doppler showed no stenosis , occlusion or calcification . patient was treated with antibiotics antiedema measures . After 2 weeks patient becomes conscious his weakness improved from 0/5 to 2/5in left upper limb and lower limb . Patient had undergone CT angiogram done after 2 weeks revealed no occlusion of peripheral vessels .Patient was transferred to cardiothoracic department . Resection of left atrial mass was done and pathologically documented as myxomatous tissue .On follow up his weakness improved further and he had no recurrence of hemiplegia.



MRI BRAIN showing sub-acute ischemic infarct of M1 segment of right MCA territory



CT Angiography showing no occlusion of peripheral vessels



Biopsy of left atrial mass showing myxomatous tissue

DISCUSSION:

Primary cardiac tumours are rare with an incidence of 0.0017 to 0.28% in unselected patients at autopsy . The annual incidence is 0.5 per million population and 75% in left atrium . There is a 2: 1 female preponderance and age of onset 30 to 60 years . Although atrial myxoma is mostly sporadic atleast 7% of cases are familial. The best described family type is carney complex characterized by cutaneous and cardiac myxomas, non cardiac myxomatous tumour and endocrinopathies. The presentation of atrial myxomas often comprises of diagnostic triad obstructive symptoms ,constitutional symptoms, embolic phenomenon. Active illness often accompanied by increase in ESR, CRP , hperglobulinemia and anaemia . Constitutional symptoms may be mediated by IL-6 produced by myxoma itself.

Strokes are recurrent and may be embolic and haemorrhagic , the presentation ranging fromProgressive multi infarct dementia to massive embolic stroke causing death. Since tumour fragments or adherent thrombus may embolize with anticoagulant it may not be protective . The presence of embolic phenomenon especially in young patients with neurological symptoms should prompt early neuroimaging and echocardiography even in the absence of ECG or auscultation abnormalities which may be absent in 36% of patient with myxoma . A murmur suggestive of mitral stenosis has been reported only in 54%. Transoesophageal echocardiography which has been reported as having 100%.Its Sensitivity in cardiac myxoma is preferred over transthoracic echocardiography. TEE may also improve the detection of other major cardioembolic sources (eg foramen ovale , atrial septal aneurysm or left ventricle aneurysm.

Cardiac MRI can assist in dileanating tumour with attachment and mobility. This information may be helpful for surgical resection which should not be deferred even in asymptomatic cases due to risk of further embolisation . Resection may lead to normalization of IL -6 . Neurological sequelae are rare.

Our case presented had one of the rare cause of young stroke .etiology of stoke in our case was left atrial myxoma .cerebral emboli are frequent presentations and complications of atrial myxoma . Eventhough atrial myxomas are relatively rare , they should be considered as a differential diagnosis for cerebral infarction especially when multiple infarcts have occurred and constitutional symptoms are reported . Once detected ,removal of atrial myxoma should be considered urgent due to great embolic potential of this condition . Improved imaging techniques such as gated cardiac MRI continue to facilitate the diagnosis of this potentially curable cause of stroke.

REFERENCES

1. Straus R, Merliss R. Primary tumor of the heart. Arch Pathol 1945;39:74–8.
2. Heath D. Pathology of cardiac tumors. Am J Cardiol 1968;21:315 –27.
3. Wold LE, Lie JT. Cardiac myxomas: a clinicopathologic profile. Am J Pathol 1980;101:219–40.
4. Schanz U, Schneider J. Endokardmyxome: Neue Aspekte zur Histopathogenese. Schweiz Med Wochenschr. 1984;114:850–7.
5. Peters MN, Hall RJ, Cooley DA, Leachman RD, Garcia E. The clinical syndrome of atrial myxoma. JAMA 1974;230:695–701.
6. Sirna S, Biller J, Skorton D, Seabold J. Cardiac evaluation of the patient with stroke. Stroke 1990;21:14–23.
7. Cerebral Embolism Task Force (1989). Cardiogenic brain embolism: the second report of the Cerebral Embolism Task Force. Arch Neurol 1989;46:727–43.
8. Sybers HD, Boake WC. Coronary and retinal embolism from left atrial myxoma. Arch Pathol 1971;91:179–82. 2000, VOL. 8, NO. 2 133 ASIAN CARDIOVASCULAR & THORACIC ANNALS Ugurlu STROKE AND MYXOMA
9. Wrisley D, Rosenberg J, Giambartolomei A, Levy I, Turiello C, Antonini T. Left ventricular myxoma discovered incidentally by echocardiography. Am Heart J 1991;121:1554–5.
10. Blondeau P. Primary cardiac tumors. French studies of 533 cases. Thorac Cardiovasc Surg 1990;38(Suppl 2): 192–5.
11. Reynen K. Cardiac myxomas. New Engl J Med 1995; 24:1610–7.
12. Sellke FW, Lemmer JH Jr, Vandenberg BF, Ehrenhaft JL.
Surgical treatment of cardiac myxomas: long-term results. Ann Thorac Surg 1990;50:557–61.
13. Shimono T, Makino S, Kanamori Y, Kinoshita T, Yada I. Left atrial myxomas. Using gross anatomic tumor types to determine clinical features and coronary angiographic findings. Chest 1995;107:674–9.
14. Bortolotti U, Maraglino G, Rubino M, Santini F, Mazzucco A, Milano A, et al. Surgical excision of intracardiac myxomas: a 20-year follow-up. Ann Thorac Surg 1990;
49:449–53.
15. Burton C, Johnston J. Multiple cerebral aneurysms and cardiac myxoma. N Engl J Med 1970;282:35–6.
16. Farah MG. Familial cardiac myxoma: a study of relatives of patients with myxoma. Chest 1994;105:65–8.
17. Yufe R, Karpati G, Carpenter S. Cardiac myxoma: a diagnostic challenge for the neurologist. Neurology 1976;26:1060–5.
18. Roeltgen DP, Weimer GR, Patterson LF. Delayed neurologic complications of left atrial myxoma. Neurology 1981;31:8–13.
19. Lee RJ, Bartzokis T, Yeoh TK, Grogin HR, Choi D, Schnittger I. Enhanced detection of intracardiac sources of cerebral emboli by transesophageal echocardiography. Stroke 1991;22:734–9.
20. Reichman H, Romberg HR, Hofmann E, Becker T, Mertnes HG. Neurological long-term follow-up in left atrial myxoma: are late complications frequent or rare? J Neurol 1992;239:

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Medicine and Medical Specialities

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Medicine and Medical Specialities

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Medicine and Medical Specialities