

Left Atrial Myxoma Mimicking Polyarteritis Nodosa

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Dear Editor:

Vasculitis leads to a loss of function in effected tissues and organs. Although the Chapel Hill consensus has established criteria for the classification of vasculitis,¹ many disorders, such as infections, cholesterol embolism, fibromuscular dysplasia, and atrial myxoma, can present as vasculitis in terms of clinic, laboratory, or radiographical findings.²⁻⁴ Here, we present 32-year-old female patient with left atrial myxoma mimicking polyarteritis nodosa.

The patient referred to our clinic with fatigue, weakness, arthralgia, myalgia, and weight loss of 5 kg over the previous six months, during which time she had been taking metoprolol for hypertension. Physical examination revealed a temperature of 37.5°C, blood pressure of 160/100 mm Hg, and a pulse rate of 85 beats/min. No neurological and cardiopulmonary abnormalities, like murmurs, were noted. On clinical examination, she had ischemia on the second, third, and fourth digits of the right lower extremity. The patient's laboratory test results were as follows: white blood cell count, 8600/mm³ with 74% neutrophils; hemoglobin, 10.7 g/dL; mean corpuscular volume, 81.9 fL; platelet count, 370000/mm³; erythrocyte sedimentation rate, 92 mm/hour; C-reactive protein, 8.4 mg/dL; alanine aminotransferase (ALT), 162 U/L; aspartate aminotransferase, 53 U/L; alkaline phosphatase, 94 U/L; gamma-glutamyl transpeptidase, 63 U/L; total bilirubin, 0.2 mg/dL; total protein, 7.7 g/dL; albumin, 4 g/dL; and urea, 58 mg/dL. Coagulation test results were within normal ranges, and urine test was negative for proteinuria and hematuria. Serum electrophoresis revealed polyclonal gammopathy. Rheumatoid factor, anti-nuclear antibody, anti-neutrophil cytoplasmic antibody, cryoglobulin, antiphospholipid antibodies, anti-hepatitis A virus IgM, anti-hepatitis C virus, anti-human immunodeficiency virus, cytomegalovirus IgM, and Epstein-Barr virus viral capsid antigen were negative. The patient was positive for hepatitis B virus (HBV) surface antigen, as well as HBeAg negative and anti-HBe positive, with HBV-DNA titres of 920 IU/mL. Abdominal ultrasonography revealed grade 1 hepatic steatosis. Based on clinical and laboratory findings, the case was diagnosed as polyarteritis nodosa, and treatment with corticosteroid (1 mg/kg/day) was initiated. We planned to monitor HBV-DNA, ALT, liver function tests, and started lamivudine due to immunosuppressive treatment. Due to complaints of fatigue, weakness, and hypertension on follow-up, an echocardiography was performed, at which time a left atrial lesion of 3.2×2 cm in size was discovered. Pulmonary arterial pressure was 54 mm Hg. Atrial myxoma was diagnosed with histopathological confirmation after cardiac surgical removal of the lesion. The steroid dose was reduced gradually, and then stopped. Also, magnetic resonance angiography was performed for vasculitis. The results were normal without aneurysms or occlusions of the visceral arteries. The patient

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is still under follow-up at our clinic with normal inflammatory markers and without any symptoms.

Polyarteritis nodosa is a systemic necrotizing vasculitis characterized by inflammation of medium to small arteritis.¹ Myxomas are primer benign cardiac tumors, and generally observed in the left atrium with female predominance. Valvular obstruction by tumoral mass effect leads to syncope and dyspnea. Embolic events, palpitations, chest pain, and pulmonary hypertension are also pre-operative symptoms.^{5,6} Pulmonary hypertension and symptoms typically decrease in the postoperative period.⁶ In our case, echocardiography was performed postoperatively, and pulmonary artery pressure decreased to normal levels. Her blood pressure was within normal ranges without any antihypertensive drug treatment. Thromboembolism, as another clinical feature, may lead to hemoptysis, hematuria or tissue infarction, and digital ischemia that can mimic vasculitis.⁷ Presence of heart murmur, necrosis of lower extremity digits, splinter hemorrhages, drug use, or unusually high fevers may be associated with mimics of vasculitis. It is important to differentiate vasculitis from vasculitis mimics for more effective treatment, for which laboratory and radiological studies may be helpful.

While using immunosuppressive agents for vasculitis, atrial myxoma as a vasculitis mimics must be treated by a surgical procedure.^{1,7} Clinicians should be conscious of vasculitis mimics in the process of managing patients with vasculitis.

REFERENCES

1. Jennette JC, Falk RJ, Andrassy K, Bacon PA, Churg J, Gross WL, et al. Nomenclature of systemic vasculitides. Proposal of an international consensus conference. *Arthritis Rheum* 1994;37:187-92.
2. Peat DS, Mathieson PW. Cholesterol emboli may mimic systemic vasculitis. *BMJ* 1996;313:546-7.
3. Siegert CE, Macfarlane JD, Hollander AM, van Kemenade F. Systemic fibromuscular dysplasia masquerading as polyarteritis nodosa. *Nephrol Dial Transplant* 1996;11:1356-8.
4. Nishio Y, Ito Y, Iguchi Y, Sato H. MPO-ANCA-associated pseudo-vasculitis in cardiac myxoma. *Eur J Neurol* 2005;12:619-20.
5. Yu SH, Lim SH, Hong YS, Yoo KJ, Chang BC, Kang MS. Clinical experiences of cardiac myxoma. *Yonsei Med J* 2006;47:367-71.
6. Kim BK, Cho JN, Park HJ, Hong SP, Son JY, Lee JB, et al. Reversible pulmonary hypertension in adolescent with left atrial myxoma. *J Cardiovasc Ultrasound* 2011;19:221-3.
7. Butany J, Nair V, Naseemuddin A, Nair GM, Catton C, Yau T. Cardiac tumours: diagnosis and management. *Lancet Oncol* 2005;6: 219-28.