Sir,

Fever of unknown origin (FUO) is a common cause of frequent referrals to emergency departments in pediatric population. The three most common etiological categories of FUO in children in order of frequency are infectious diseases, connective tissue diseases, and neoplasms. A ten-year-old boy was presented to our hospital with a chief complaint of fever for 10 days, particularly at night. He was prescribed amoxicillin/clavulanic acid per-orally (PO) to treat upper respiratory tract infection before admission. Because of persisting fever, PO clarithromycin was added to his therapy 4 days ago. The patient had no complaints other than fever. Vital signs, general condition and physical examination findings were normal, except for hyperemic oropharyngeal mucosa and a grade 2/6 systolic murmur on mitral area. His laboratory findings were as follows: white blood cell 12800/mm³ (73.4% polymorphonuclear leukocytes, 21.4% lymphocytes, 4.9% monocytes), hemoglobin 12.9 g/dL (normal 13-17), platelets 742 x 10³/uL, C-reactive protein 51 mg/L (normal 0-8 mg/L), erythrocyte sedimentation rate 80 mm/hour (normal 0-19), antistreptolysin O 2243 IU/mL (normal 0-200), and ferritin 220.8 ng/ml (normal 14-124). Anti-toxoplasma/cytomegalovirus (CMV), ebstein-barr virus (EBV) VCA Ig M, brucella and Salmonella group agglutinins, spot urinalysis tests, liver and renal function tests, electrolytes, chest X-ray, and abdominal ultrasonography were in normal limits. Because of the murmur heard during auscultation, the patient underwent echocardiography and a thick mitral valve, grade one mitral, and aortic regurgitation were observed. There were no signs of vegetation and effusion. A first-degree AV block and sinus tachycardia were detected on his electrocardiogram. With these findings, the patient was diagnosed as isolated acute rheumatic fever (ARF) carditis based on Jones criteria and was treated with steroids. By the beginning of therapy, fever resolved and acute phase reactants declined to normal values immediately after first week.

With the application of the World Health Organization echocardiographic criteria, the prevalence of subclinical carditis was found to be 18.1%. Even in the golden era of clinical auscultation, a number of patients with no audible murmurs in the first attack of ARF developed rheumatic heart disease on follow-up, suggesting that carditis was missed by clinical examination. Furthermore, echocardiography is of immense value in ruling out cardiac pathologies as a cause of FUO. Besides miscellaneous cardiac etiologies of FUO like Kawasaki disease, endocarditis and myocarditis, in this case, we aimed to draw attention to presentation of isolated ARF carditis without other clinical findings such as arthritis/arthralgia.

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Received: June 10, 2015; Accepted: February 18, 2016.

LETTER TO THE EDITOR

Acute Rheumatic Fever Carditis Presenting as Fever of Unknown Origin

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