A Headache for the Doctor but not for the Patient. Monocytosis, an Exceptional Finding in Giant Cell Arteritis

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Abstract

Giant cell arteritis (GCA) is a systemic inflammatory vasculitis of the elderly affecting primarily the large arteries of the head. A huge clinical spectrum of symptoms accompanies the onset of the disease with headaches, jaw claudication and visual disorders being the most common. However, symptoms like dry cough or simply fever could also insinuate the beginning of the disease. We report the case of a 65-year-old man with fever of unknown origin along with persistent monocytosis that proved to be a case of GCA. To our knowledge, monocytosis associated with GCA has never been reported in the literature before.

Keywords: Giant cell arteritis, monocytosis, hyperferritinemia.

Introduction

We report a rare case of temporal arteritis manifesting with monocytosis, fever of unknown origin and hyperferritinemia. A careful search of the literature has revealed that persistent monocytosis has never been correlated with the disease before.

Case Report

A 65-year-old Caucasian man was referred to our department for investigation of fever starting 10 days ago associated with anemia, monocytosis and elevated erythrocyte sedimentation rate. The patient did not report any other symptoms. In addition, he did not report any trip abroad recently or contact with animals. Reviewing his past medical history, he had diabetes mellitus and an episode of upper gastrointestinal bleeding one year ago.

On admission, the patient was febrile (38°C) with no other symptoms. A thorough physical examination revealed mild decrease of the breath sound...
bilaterally and a systolic heart murmur in mitral valve.

Routine hematological and biochemical examinations revealed moderate leukocytosis (WBC=15.26x10^3/μL), severe monocytosis (MO%=32.5%), anemia normochromic, normocytic (Hb=9.15g/dl), thrombocytosis (PLT=500x10^3/μL), mild increase of liver aminotransferases, hypoalbuminemia, very high ferritin levels (1288 ng/ml, reference values for men 22-322ng/ml) and high levels of erythrocyte sedimentation rate (107mm/h) along with C-reactive protein (159mg/L).

Extensive laboratory examinations did not detect an infectious agent. All blood and urine cultures were negative.

Hematologic disease was excluded since observation of peripheral blood smear, aspiration of bone marrow and bone marrow biopsy along with immunostaining of both peripheral blood and bone marrow were normal. Computed tomography of the chest and the abdomen revealed only mild pleural effusions. Endoscopic evaluation of the upper and lower gastrointestinal tract along with transesophageal echocardiogram were normal. The immunologic profile showed only mild increase of immunoglobulins IgA and IgG.

Without having reached a concrete diagnosis, we performed biopsy of the temporal artery. The histopathological result was suggestive of giant cell arteritis. The patient was put on treatment with high dose of corticosteroids (prednisolone 1mg/kg/day) followed by a dramatic clinical and laboratory response. Our patient was sent home on methylprednisolone per os with dose reductions for tapering off steroids.

Discussion

We report a very unusual case of giant cell arteritis presenting with marked monocytosis, fever of unknown origin and high ferritin levels.

Giant cell arteritis is the most common vasculitis of people older than 50 years. Emphasis must be given on the extreme clinical manifestations of the disease ranging from classical symptoms like headache to completely asymptomatic cases. Monocytosis has never been associated with the disease although it is well established that it can accompany chronic inflammatory processes. High ferritin level is also an unusual finding.

In our patient, we proceeded with the gold standard technique for diagnosing giant cell arteritis which is the biopsy of the temporal artery. Histopathology revealed fragments of artery with local, lymphocytic, inflammatory infiltration of the tunica adventitia and the tunica media. In addition, intense fibroblastic hyperplasia of the tunica intima causing severe obstruction of the lumen of the vessel, was detected. The result along with the clinical and laboratory findings proved to be suggestive of giant cell arteritis and the patient received the cornerstone of treatment which is corticosteroids.

In conclusion, giant cell arteritis is a great mimic. Despite its common, widely observed symptoms and laboratory findings, subtle manifestations and some notable laboratory results can occur. Thus physicians must have a very high index of suspicion in order to diagnose the disease.

References


