



THE BENIGN CHILDHOOD ACUTE MYOSITIS: CASE REPORT

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ABSTRACT Benign acute childhood myositis found in male children, especially school going, and is a self-limiting medical condition presented with difficulty in walking mimicking spastic gait. It frequently affects gastrocnemius and soleus muscle. Most cases follow viral infection with enterovirus, Mycoplasma pneumonia, Dengue virus, H1N1 Influenza, Parainfluenza Type-1 virus. The differential diagnosis includes Guillain-Barré syndrome, Rhabdomyolysis, Dermatomyositis, Poliomyositis, muscular dystrophy, DVT. This article presents a benign acute childhood myositis case developing in a 14-year-old male patient.

KEYWORDS : Myositis, Creatinine phosphokinase [CPK], muscle weakness

INTRODUCTION

Benign acute childhood myositis (BACM) was first described in 1957 by Lundberg and coined the term "Myalgia Cruris Epidemica". Patients presented with the sudden onset of calf pain and difficulty in walking, often after a prodromal viral upper respiratory tract infection. The serum creatine phosphokinase (CPK) is markedly elevated. Boys are affected more commonly, and it is followed by rapid recovery usually within a week. It is rarely reported in adults. This article presents a benign acute childhood myositis case developing in a 14-year-old male patient.

CASE REPORT

A 14-year-old boy, of lower socioeconomic class presented with chief c/o low grade fever since 5 days, f/b fatigue, weakness, difficulty in walking and generalized body ache in our hospital. There was no any history of joint pain, bleeding/petechie/rash, trauma, and travel to outside or headache. There was no any past history of any major illness or any similar episode and NO family history of similar clinical course. Our patient was of average built with vegetarian diet and normal bladder, bowel and normal sleep pattern with no addiction. Patient had taken all the vaccines according to his age.

On CNS examination of our patient, he was conscious well oriented to time place and person with normal speech, memory and language with normal cranial nerve examination. He was having decreased power in all limbs, with normal tone, plantar reflexes, superficial and deep reflexes, along with normal sensory system findings.

INVESTIGATIONS:

On admission in patient's hemogram total count was 12600, platelets – 1.41 lac, ESR was raised – 41. Serum RA, ASO were negative but C-reactive protein was positive. SGPT was 73 IU/l and SGOT was 154 IU/l. CPK total was on admission 24,090 U/L which was decreased to 12,000 U/L on follow-up examination. S. dengue IgM and S. chikungunya IgM were negative and urine myoglobin and bilateral upper and lower limb venous Doppler were NAD.

Test details	Result	Unit	Normal range
ENZYME ESTIMATION			
CPK	24090	U/L	25 - 190 U/L
TEST DESCRIPTION	DONE ON FULLY AUTOMATED BIOCHEMISTRY ANALYSER COBAS NITSA 400 PLUS FROM ROCHE-GERMANY		
SAMPLE RECEIVED/COLLECTED LAB ID: 190 - Entered by: Dr.HC Entered Date/Time: 2018/05/17 2:30:00 PM#ANAGAD Certified by: HMD Issued Date/Time: 2018/05/17 2:30:00 PM#ANAGAD			

Image 1: CPK total enzyme on admission



Image 2: of a patient showing swelling of both arms.

DISCUSSION:

BCAP is a self-limiting process characterized by muscle pain, more often calf pain, manifested by difficulty in walking. Exact pathogenesis of BCAP is not known. Some evidences suggest that increased tropism for immature muscle cells, so some virus acts as trigger in genetically predisposed persons. It follows a flu like illness and patient may have difficulty in walking mimicking spastic gait. It frequently affects gastrocnemius muscle.

Most cases follows viral infection with enterovirus, mycoplasma pneumonia, dengue virus, H1N1, Influenza, Parainfluenza type 1. Some cases may develop severe rhabdomyolysis and require dialysis. Median time duration between fever and onset of myositis is 3 days.

It doesn't require any invasive test or medical therapy, but usually radiography, Echocardiogram, EMG, MRI are done mistakenly. For the diagnosis of BACM, the most typical diagnostic finding is an increased CPK level in the serum. Moderate degree CPK has been reported to range from 558 to 6800. In our case, the CPK level was 24090.

Viral test should not be routinely performed because of time interval between infection and seroconversion, also etiological agent will not found always and antiviral drugs are not recommended.

CONCLUSION:

The BCAP is the self-limiting medical condition most commonly found in preschool and school going children, most commonly associated with viral infection particularly influenza B with a very good prognosis. Clinicians and pediatricians must be aware of this condition to differentiate it from other cases of acute onset of inability to walk and to provide unnecessary investigations.

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