



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol. 10, Issue, 12, pp.76420-76421, December, 2018

DOI: <https://doi.org/10.24941/ijcr.32755.12.2018>

RESEARCH ARTICLE

A CASE STUDY ON INFLAMMATORY MYOSITIS

***Dr. Nischal Chovatiya, Dr. Shyam Shah and Dr. U. S. Gediya**

Department of General Medicine, C.U. Shah Medical College, Surendranagar

ARTICLE INFO

Article History:

Received 16th September, 2018
Received in revised form
29th October, 2018
Accepted 01st November, 2018
Published online 31st December, 2018

Key Words:

Myositis, Polymyopathies,
Dermatomyositis

Copyright © 2018, Dr. Nischal Chovatiya et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Nischal Chovatiya, Dr. Shyam Shah and Dr. U. S. Gediya. 2018. "A case study on inflammatory myositis", *International Journal of Current Research*, 10, (12), 76420-76421.

ABSTRACT

A 30 year old female patient presented with complaints of weakness of all four limbs, swelling and pain on movement, difficulty in walking since last one month. She was investigated and diagnosed as a case of inflammatory myositis, she was treated with steroids, she showed good response to steroids and was discharged.

INTRODUCTION

Inflammatory myopathies are a group of diseases, with no known cause, that involve chronic muscle inflammation accompanied by muscle weakness. The four main types of chronic, or long-term, inflammatory myopathies are polymyositis, dermatomyositis, inclusion body myositis, and necrotizing autoimmune myopathy. Although the cause of many inflammatory myopathies is unknown, the majority are considered to be autoimmune disorders, in which the body's immune response system that normally defends against infection and disease attacks its own muscle fibers, blood vessels, connective tissue, organs, or joints. These rare disorders may affect both adults and children, although dermatomyositis is more common in children. Polymyositis and dermatomyositis are more common in women than in men. Inclusion body myositis is most common after age 50. General symptoms of chronic inflammatory myopathy include slow but progressive muscle weakness that starts in the proximal muscles—those muscles closest to the trunk of the body. Other symptoms include fatigue after walking or standing, tripping or falling, and difficulty swallowing or breathing. Some individuals may have slight muscle pain or muscles that are tender to the touch. Polymyositis affects skeletal muscles (involved with making movement) on both sides of the body. Dermatomyositis is characterized by a skin rash that precedes or accompanies progressive muscle weakness.

Inflammatory myopathy is characterized by progressive muscle weakness and wasting. Juvenile myositis has some similarities to adult dermatomyositis and polymyositis. Symptoms of necrotizing autoimmune myopathy include weakness in both the upper and lower body, difficulty in rising from low chairs, climbing stairs, or lifting objects, fatigue, weight loss, and muscle pain.

Case Report

History

A 30 year old female patient presented with complaints of weakness of all four limbs, swelling and pain on movement, difficulty in walking since last one month. she gave a preceding history of chickengunya infection 15 days back. She had proximal muscle weakness which was progressive in nature involving upper limb more than lower. There was no diurnal variation. The most striking feature was that she was not able to raise arm above shoulder and difficulty in standing from sitting position and change in quality of voice and pain in all 4 limbs. Fine motor movement were normal i.e she was able to do buttoning and unbuttoning, there was no difficulty in wearing chhappals.

Examination: On examination she was alert, fully oriented.

Painless muscle weakness prevented her from standing or sitting. she had normal strength in both her hands and her feet, but active lifting of her head, legs, and arms was barely possible while she was supine, and her speech was hypophonic. She had non pitting edema in her lower legs.

*Corresponding author: Dr. Nischal Chovatiya
Department of General Medicine, C.U. Shah Medical College, Surendranagar

Types of myositis

| Characteristic | Polymyositis | Dermatomyositis | Inclusion body Myositis |
|---|--------------|---|-------------------------|
| Age at onset | >18 years | Adulthood | Childhood |
| Familial association | No | Yes | In some cases |
| Extramuscular manifestations | Yes | Yes | Yes |
| Associated condition connective tissue diseases | Yes | Scleroderma and mixed connective tissue disease (overlap syndromes) | Yes in upto 20 % cases |
| Malignancy | No | Yes in upto 15% of cases | No |
| Viruses | Yes | Unproven | Yes |
| Drugs | Yes | Yes, rarely | No |
| Parasites and bacteria | Yes | No | No |

Criteria for diagnosis of inflammatory myositis

| CRITERION | DEFINATIVE | PROBABLE |
|----------------------------|--|--|
| Myopathic muscle weakness | Yes | Yes |
| Electromyographic findings | Myopathic | Myopathic |
| Muscle biopsy findings | Primary inflammation with CD8/MCH-1 complex with no vacuoles | Ubiquitous mch-1 expression with minimal inflammation and vacuoles |
| Muscle enzymes | Elevated upto 50 fold | Elevated upto 50 fold |
| Rash or calcinosis | absent | Absent |

With tenderness in all 4 limbs. Her reflexes, eye movements, and cranial nerve function were normal with plantar flexor response. No involvement of extraocular muscle and facial muscles. Meningeal signs were absent. No lesions on skin were noted.

Lab data

Her laboratory values were as follows: hemoglobin 8.99 g/L, leukocyte count $9.1 \times 10^9/L$, erythrocyte sedimentation rate 14 mm/hour, creatine kinase 1508 U/L, C-reactive protein was positive, creatinine 0.4 mg/dl, urea 26mg/dl, sodium 142 mmol/L, and potassium 4.3 mmol/L. thyroid gland function were normal, and her human immunodeficiency virus test was negative. Additional serological tests for hepatitis B, hepatitis C, anti-nuclear antibodies, all yielded negative results. EMG suggestive of myopathic features. Muscle biopsy shows dense chronic endomysial inflammatory infiltrate.

Management

Patient was initially treated with injectable antibiotics and diuretics which was later omitted after blood reports and patient was put on

- Tablet OMNACORTIL (METHYLPREDNISOLONE) 60 mg once a day for 5 days and was tapered accordingly for upto 28 days
- Tablet AZORAN (AZATHIOPRINE) 50 mg once a day for 5 days which was later increased to twice a day

DISCUSSION

The inflammatory myopathies are a heterogeneous group of diseases with diverse clinicopathological features and etiologies. The latest classification of these disorders is shown in Table 1. Focal or at times more widespread forms of myositis can be caused by viral, bacterial, fungal, protozoal or parasitic microorganisms and the clinical and pathological features and treatment of these infective forms of myositis are well-documented in other reviews.

Conclusion

We suspected inflammatory myositis with clinical symptoms and confirmed it with nerve conduction studies. Within 2 weeks of treatment, she was able to move freely without any pain was able to all her routine activity with any help of others.

Acknowledgement

I acknowledge the support our professor and head Dr. U. S. Gediya, senior residents, my colleagues, juniors, hospital staff and laboratory staff for their support.

REFERENCES

- Amato, A.A., Griggs, R.C. "Treatment of idiopathic inflammatory myopathies". *Current Opinion in Neurology*. vol. 16. 2003. pp. 569-75.
- Askanas, V, Engel, W.K. "Proposed pathogenetic cascade of inclusion-body myositis: importance of amyloid-beta, misfolded proteins, predisposing genes, and aging". *Current Opinion in Rheumatology*. vol. 15. 2003. pp. 737-44.
- Baer, A.N. "Differential diagnosis of idiopathic inflammatory myopathies". *Current Rheumatology Reports*. vol. 8. 2006. pp. 178-87.
- Baer, A.N., Wortmann, R.L. "Myotoxicity associated with lipid-lowering drugs". *Current Opinion in Rheumatology*. vol. 19. 2007. pp. 67-73.
- Banwell, B.L., Gomez, M.R, Engel, A.G, Franzini-Armstrong, C. *The Clinical Examination, in Myology*. McGraw-Hill. 2004. pp. 599-618.
- Bohan, A, Peter, J. "Polymyositis and dermatomyositis". *New England Journal of Medicine*. vol. 292. 1975. pp. 403-07.
- Bolosi, H.D., Man, L, Rednic, S. "The effect of methylprednisone pulse therapy in polymyositis/dermatomyositis". *Advances in Experimental Medicine and Biology*. vol. 455. 1999. pp. 349-357.