

# Acute Multiple Sclerosis (Marburg's Variant) Misdiagnosis Can Increase Morbidity



## Medical Science

KEYWORDS :

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| DR.VISHAL SHARMA     | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR.N.M.KADRI         | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR.HARDIK PATEL      | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR.MITESH CHANDARANA | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR INDRESH DIXIT     | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR SWATI TRIVEDI     | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |
| DR RAVI PATEL        | MEDICINE DEPARTMENT, CIVIL HOSPITAL ,AHMEDABAD |

### ABSTRACT

- Multiple sclerosis -once believed to be rare is now increasing in incidence-thanks to better diagnostic techniques, and has a wide range of presentation with equally wide range of age of onset. Sometimes primary presentation might be unusual and may require thorough investigation to avoid misdiagnosis.
- Here we present a case of Acute Multiple Sclerosis which was initially diagnosed as CV stroke by another centre making morbidity higher for patient.

### INTRODUCTION:

Multiple sclerosis is an immune mediated demyelinating disorder characterized by inflammation, demyelination, gliosis and neuronal loss. The course can be relapsing remitting or progressive.

The condition is threefold common in women than men and age of onset is typically between 20 and 40 years (slightly later in men). There are around 40,000 to 50,000 people affected in India with predominance of optico-spinal variety. Higher incidence is observed in Parsi community.

Auto reactive T Lymphocytes and antibodies appear to be responsible for most cases and it is usually associated with developmentally immature Myelin basic protein- one (MBP-1) which serves as antigen. Some rare cases with viruses and environmental factors as causative agents though have been reported.

### CASES:

A 20 year old and third month postpartum female having first live male child presented with dimness of vision, sequential weakness of left upper limb and lower limb during last one month without any remission. She had cognitive impairment (an uncommon occurrence in multiple sclerosis), inability to speak and eat, constipation and urine retention along with paresthesia at different body sites for same duration. Her antenatal and immediate post-partum periods were insignificant and she had no respiratory infection or vaccination. Her general examination was unremarkable with pulse 90 per mm, Blood pressure 126/80 mmHg and pallor without icterus.

Systemic examination showed cognitive impairment, decreased visual acuity with normal fundus examination, spastic hemiplegia involving left side of the body with exaggerated DTR including jaw jerk, plantar were bilateral extensor, she could localize pain but due to cognitive impairment other higher functions could not be assessed.

Her lab values viz. CBC, LFT, RFT, SERUM ELECTROLYTES, VIT-B12 and ESR were within normal limits.

She was negative for ANA, RA, VDRL, HIV and HB5AG.

Her CSF examination showed proteins 53.7mg%, glucose

121.4mg% and chloride 108mg% and total cells 4 with all lymphocytes and no AFB.

MRI Brain and spine with contrast showed altered signal intensity involving bilateral fronto-parietal region predominantly in periventricular region with involvement of corpus callosum, pons and midbrain on right side suggestive of tumefactive demyelination along with thinning and mild atrophy of dorsal spinal cord extending from D2-D9 level. There was no evidence of infarct, haemorrhage or any sinus thrombosis.



FIG-1 MRI Brain WITH CONTRAST:

She was given injectable MPS along with antibiotics, I.V fluids prokinetics and stool softeners for constipation and other symptomatic management. After 7 days of MPS she was given oral steroids and later discharged with tapering dose of oral steroids. When patient came for follow-up her condition improved, vision and cognition were better and weakness on the left side of her body decreased. Her repeat MRI Brain showed decrease in the degree of demyelination. Her condition overall would have been better had she been diagnosed earlier.

**DISCUSSION & CONCLUSION:**

Acute multiple sclerosis is rare fulminant rapidly progressive demyelinating process first described by Otto Marburg in 1906. The young lady in this case had this rare variant of multiple sclerosis.

Initially patient had only blurred vision and weakness in left upper limb when she was taken to private hospital where the treating physician suspecting young stroke got CT brain scan

done- Large demyelinated part of brain was reported as infarct by radiologist. Not suspecting a demyelinating lesion physician treated her as a case of young CV stroke and the patient deteriorated and was referred to our centre.

This shows that a high degree of suspicion proper diagnostic approach and timely intervention could to some degree decrease morbidity in such young female patients.

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