

# Clinically definite multiple sclerosis in a young Malay female A Case Report

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## Summary

This is a report of a 14-year old Malay girl with clinically definite multiple sclerosis, who had six relapses involving the spinal cord and optic nerve. She passed away after 18 months of illness, demonstrating the aggressive course of the disease.

## Introduction

Though said to be rare, multiple sclerosis has been seen both in Singapore and Malaysia, though none was autopsy proven. As there is no specific laboratory test during life, the diagnosis is thus based on a series of diagnostic criteria. See Table 1.

## Case Report

S.M.S. was a 14-year old ethnic Malay schoolgirl born and brought up in Penang. She was in good health until late January, 1985, when she had a mild upper respiratory tract infection. Two weeks later, she developed moderate weakness of both lower limbs over a few days with absent reflexes of the same limbs and sensory level to T8. Lumbar puncture was done showing mildly raised protein at 58 mg% only. The patient was given prednisolone and recovered completely in two weeks.

In April, 1985, she was readmitted with moderate weakness of the left upper limb and both lower limbs. The onset was over two weeks. There was no precipitating factor. On examination, the upper limb reflexes were absent whereas both knee jerks were brisk. There was impaired positional sensation in the fingers on both sides and the left toes. Cervical myelography and C.T. scan of the head were normal. She was given an ACTH injection and recovered over one week.

In August, 1985, she developed a sudden onset of pain and blurring of vision in the left eye. She was able to see hand movement only, with blurring of optic disc in the same eye. She was given prednisolone and recovered from this over weeks and has residual slight left optic disc pallor. She was eventually able to read 6/6.

In November, 1985, she was again admitted with severe tetraparesis, being confined to bed. The reflexes in the upper limbs were absent, the lower limb reflexes were brisk with extensor plantar responses. The sensory level to pin prick was at T10. Positional test was impaired in both lower limbs. She improved with ACTH injection and was able to walk after 4 weeks. She went back to school and achieved normal muscle power.

In April, 1986, the patient had a relapse of tetraparesis particularly in the lower limbs and was confined to bed. The sensory level was at T3. She was again put on ACTH but this time the recovery was slow. She managed eventually to achieve grade 1 -2 power in the lower limbs, but was unable to sit up and needed assistance to turn in bed. The patient became depressed.

In July, 1986, she was readmitted with aggravation of severe tetraparesis over one week. The patient was bedridden. She was also dyspnoeic. The mental state was, however, clear with no brainstem and cerebellar symptoms. When there was no improvement after two days, the father decided to take the patient home against medical advice. She passed away two days later in the house. Throughout the length of the illness, tests for systemic illness were negative. This included full blood count, ESR, BUSE, blood C3, C4, ANF, TPHA, VDRL, and chest X-ray.

## Discussion

This patient had a relapsing and remitting neurological illness involving the thoracic spinal cord at the onset, left optic nerve during the third relapse and cervical spinal cord in the other four relapses. She most likely passed away from respiratory failure due to the high cervical transverse myelopathy developed in the last relapse. During the extended period of observation of 18 months, she did not manifest evidence of systemic illness to explain her neurological disability. She fulfills the criteria for clinically definite multiple sclerosis according to McDonald & Halliday.<sup>1</sup>

Table 1

### Diagnostic criteria of clinically definite multiple sclerosis

1. Remitting and relapsing history with two or more episodes.
2. Evidence of lesions at two or more necessary sites in the CNS.
3. Lesions predominantly in the white matter.
4. Age at onset of symptoms 10-50 years.
5. No better explanation for the observed abnormalities.

When large series of cases of multiple sclerosis from East and West are compared, the striking similarity in the age of onset, clinical course of remission and relapse suggest that they are essentially the same disease. There is however, some difference in the clinical pattern of the disease. A higher incidence of visual lesion at the onset of illness, more severe residual visual disability, more frequent occurrence of acute transverse myelopathy, optic-spinal and optic-brainstem-spinal clinical forms, classical Devic's syndrome are seen in the orientals. On the other hand, the cerebellar disturbance was less frequently seen in patients from the East and a family history of similar illness among the orientals is rare.<sup>2,3</sup> This patient manifested a clinical pattern of recurrent optic-spinal syndrome.

The relapse rate of the illness differs between various series reported, as well as individual patients with figures of around two years. The mortality rate reported from different series was also variable. Shibashaki et al reported a mortality rate of 6.7% for patients from the Kyushu University in Japan with duration of follow up of 8 years. Similar figures from Maida Vale in England was 1.5% with duration of follow up of 11 years.<sup>3</sup>

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### Reference

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