

Title : Efficacy of interferon- β for demyelinating disorders with myelin oligodendrocyte glycoprotein antibody.

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【Background】

Antibody against myelin oligodendrocyte glycoprotein (MOG-Ab) can be detected in various demyelinating disorders of CNS including pediatric MS, but is rarely detected in adult MS. Interferon- β (IFN β) may be used under diagnosis of MS,

but its efficacy for MOG-Ab+ cases is not known.

【Objectives】

To evaluate the efficacy of IFN β retrospectively in MOG-Ab+ cases.

【Material and methods】

We screened 1727 serum samples and identified 26 MOG-Ab+ cases who had been treated with IFN β .

【Results】

Among 26 cases, 12 cases were male. The mean present age was 14 years old, and 14 cases were younger than 18 years old. 13 cases had been treated with IFN β -1a, 11 patients with IFN β -1b, and 2 patients with both at different periods. Most of the pediatric cases were treated with reduced doses of IFN β together with prednisolone (PSL). In 10/26 cases, IFN β was used more than 1 year. In 13/26 cases, clinical relapse occurred within 4 month after initiation of IFN β treatment. Currently, only 3/26 cases were treated with IFN β , and reason for discontinuation of IFN β treatment was clinical relapse in 18 cases. Limited to the cases treated with IFN β more than 6 months, ARR was not decreased in period IFN β was used compared with that IFN β was not used.

【Discussion】

IFN β did not reduce disease activity of MOG-Ab+ demyelinating disorders. IFN β is known to exacerbate the autoimmune disease due to upregulation of humoral immunity. Since MOG-Ab+ disease is also thought to be an antibody mediated disease, IFN β may be harmful.

【Conclusion】

IFN β should not be recommended for prophylactic use in MOG-Ab+ cases.