

# NEW-ONSET MULTIPLE SCLEROSIS ASSOCIATED WITH ADALIMUMAB

## TREATMENT: ABOUT TWO CASE REPORTS.

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### Background and importance

Treatment with adalimumab offers an improvement in autoimmune diseases and it's considered well tolerated. Demyelination with adalimumab have been described in several case reports.

### Aim and objectives

To describe two cases of Multiple Sclerosis (MS) triggered by adalimumab treatment

### Materials and methods

- Descriptive and retrospective clinical cases that occurred in October 2021.
- Data were obtained by medical records.
- The causal relationship between adalimumab and MS was assessed using the Naranjo's algorithm.

### Results



**Pacient 1:** 41-year-old, woman with psoriasis diagnosed 5 years ago in treatment with adalimumab for 2 years with no history of neurological disease.



She presented loss of strength, ataxia and paresthesias. She was treated with methylprednisolone for 5 days with functional improvement and adalimumab was stopped.

Magnetic resonance imaging (MRI) revealed intramedullary lesion of C2, showing two possible diagnosis: inflammatory myelitis as the first possibility or tumor origin. She presented systemic autoimmunity stigmas (positive antibodies antinuclear, oligoclonal bands (OCBs) positive in cerebrospinal fluid and serum and psoriasis).

Six months later, she had a new possible cervical outbreak. MRI showed the appearance of a parasagittal occipital cortico-subcortical lesion confirming the diagnosis of MS according to McDonald's criteria(2017).

DIMETHYL FUMARATE



**Pacient 2:** 43-year-old, woman with ankylosing spondylitis HLA-B27+ in treatment with adalimumab 5 months ago and no history of demyelinating diseases.



She presented ataxia and hemihypoesthesia. She was treated with methylprednisolone for 5 days with functional improvement stopping adalimumab treatment.

In the MRI, multiple lesions with dissemination criteria in space (1 periventricular, 1 infratentorial), and in time (only one of them with gadolinium uptake, currently apparently asymptomatic), the patient met McDonald's criteria (2017) for MS with OCBs negative.

OCRELIZUMAB

Naranjo's algorithm determined as adverse drug reactions probable in patient 1 and possible in patient 2

### Conclusion and relevance

- ✓ A potential link between adalimumab and MS was related in these cases.
- ✓ Although this relationship have been associated in rare cases, adalimumab should be avoided in patients with history of demyelinating disorders.
- ✓ Patients should be informed of possible symptoms at the start of therapy and treatment should be discontinued if they develop them.

