

# Time to start prophylactic treatment is delayed in NMOSD patients with isolated optic neuritis at disease onset

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## Introduction:

Optic neuritis (ON) is a severe disabling disease which requires early diagnosis and prompt treatment to prevent new relapses.

## Objective:

To study the time interval between ON onset and the onset of prophylactic treatment in a cohort of NMOSD patients.

## Methods:

We analyzed the characteristics of a group of patients seen at our Center with a probable diagnosis of NMOSD. We selected patients who both met the 2015 IPND criteria for NMOSD diagnosis and presented ON either at onset or course of the disease.

## Results:

Out of 187 patients, 85 (42.4%) met the inclusion criteria. In 42 (49.4%) ON occurred at disease onset (as an isolated symptom in 30, 71.4%; and in association with other symptoms in 12, 28.6%). Comparison between the two groups showed females in 80% and 75%, age at onset of ON was 30 and 31 years, respectively. There was no difference regarding race distribution ( $p=0.902$ ). The median duration of NMOSD was 109 months in patients with isolated ON, and 72 months in patients with associated-ON ( $p=0.215$ ). The median time interval between disease onset and onset of prophylactic treatment was 34 months for the isolated-ON group, and 9 months for the ON-associated group, ( $p=0.055$ ). At last visit, 27/30 patients in the isolated-ON group were in use of azathioprine, 1/30 of mycophenolate mofetil; whereas 2/30 were not in treatment. Three patients were given cyclophosphamide previously. In the ON-associated group at disease onset, 12/12 were in use of azathioprine whereas, 1 had been previously treated with cyclophosphamide and 1 with methotrexate.

**Table.** Comparison between ON as an isolated symptom and in association with other symptoms, at disease onset.

	Isolated ON (n=30)	Associated ON (n=12)	P value
Age at onset (years), median [IQR]	30 [5-68]	31 [19-52]	0.933
Female sex, n (%)	24 (80)	9 (75)	0.699
Disease duration (months), median [IQR]	109 [9-279]	72 [9-215]	0.215
<b>Time from onset to treatment (months), median [IQR]</b>	<b>34 [3-249]</b>	<b>9 [0-180]</b>	<b>0.055</b>

## Conclusions:

NMOSD patients with isolated ON at disease onset receive prophylactic treatment later than those with ON in association with other symptoms. Delay to start treatment may impact the disease outcome in NMOSD patients with isolated ON at onset.

## References:

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