

Neuromyelitis spectrum disorders in Argentina: baseline data from the

Argentinean MS Registry (RelevarEM)



Juan Ignacio Rojas, Edgardo Cristiano, Jimena Miguez, Liliana Patrucco, Carlos Vrech, Edgar Carnero Contentti, María E. Balbuena, Carolina Mainella, Susana del V. Liwacki, Felisa Leguizamón, Eduardo Knorre, Facundo Silveira, Diego Giunta, Marina Alonso Serena, María L. Doldan, Gisela Zanga, Pablo A. López, Marcela Fiol, María I. Gaitán, Mariano Marrodan, Laura Negrotto, María C. Ysraelit, Pedro Nofal, Norma Deri, Patricio A. Blaya, María E. Fracaro, Santiago Bestoso, Nora Fernández Liguori, Luciana Lázaro, Orlando Garcea, Adriana Carrá, Jorge Correale on behalf of **RelevarEM** investigators

INTRODUCTION

No ongoing nationwide registry exists in Latin America (LATAM), a region where the disease behaves differently than in other regions. The objective of this study is to describe the baseline data of neuromyelitis spectrum disorders (NMOSD) patients included in RelevarEM the first nationwide multiple sclerosis (MS) and NMOSD registry in Argentina and Latin America (Clinical Trials registry number NCT03375177).

METHODS

RelevarEM is a longitudinal, strictly observational MS and NMOSD registry in Argentina. The registry is open to all practicing neurologists, MS specialists and their teams across the country. It tracks the outcomes of routine clinical patients with MS and NMOSD in a web-based platform that allows researchers to register and follow-up their patients.

From May 2018 to March 2019, the centers and principal investigators were contacted and incorporated into the registry.

All included patients in the registry provided an oral or signed consent form.

CONCLUSION

In our study, we observed that in NMOSD patients, most described were females; the aquaporin 4 test was positive in 56.2%, and 79% were on immunosuppression.

This is the first analysis of NMOSD from the longitudinal Argentinean registry of MS and NMOSD.

This initiative will provide reliable real-world data of NMOSD in the country.

NMOSD patient included	n= 75
Immunosuppression received	
Rituximab, n (%)	27 (36)
Azathioprine, n (%)	28 (37.7)
Mycophenolate mofetil, n (%)	4 (5.3)
NO treatment, n (%)	16 (21.4)
Mean EDSS (range)	2.5 (1 – 8)
Working status	
Currently working, n (%)	28 (37.33)
Retired due to the disease, n (%)	11 (14.7)

Table 2: Treatment and working status of included NMO patients

RESULTS

56 centers and 98 professionals distributed throughout Argentina become part of the Registry.

A total of 75 NMOSD patients were included, mean age 40 ± 7 years (range 31-53), female sex 78.7%, mean disease duration 5 ± 3.5 years, mean EDSS 2.5 (range 1-8).

The most frequent symptom at onset was optic neuritis (52%) and 97% of included patients were tested with aquaporin 4 test, being positive in 56%.

Almost 64% of patients were on specific treatment for NMOSD (rituximab 37%, mofetil mycophenolate 20%, azathioprine 4%). 14.6 % were retired due to the disease.

NMOSD patients included	n= 75
Mean age \pm SD (range)	40 ± 7 (31 – 53)
Female sex, n (%)	59 (78.7)
Mean disease duration, years (SD)	5 (7.9)
First relapse symptom	
Optic neuritis, n (%)	39 (52)
Myelitis, n (%)	33 (44)
Brainstem syndrome, n (%)	2 (2.7)
Cerebrum syndrome, n (%)	1 (1.3)
Aquaporin 4 test performed, n (%)	73 (97)
Positive aquaporin 4 test, n (%)	41 (56.2)
Negative aquaporin 4 test, n (%)	32 (43.8)
Technique used for aquaporin 4 test	
IFI, n (%)	21 (28.6)
ELISA, n (%)	1 (1.4)
Cell based assessment, n (%)	51 (70)

Table 1: Baseline characteristics of included NMO patients

REFERENCES

- Kurtzke JF. Epidemiology and etiology of multiple sclerosis. *Phys Med Rehabil Clin N Am* **2005**; 16(2): 327-349
- Rojas JI, Carrá A, Correale J, et al. The Argentinean multiple sclerosis registry (RelevarEM): Methodological aspects and directions. *Mult Scler Relat Disord* **2019**; 32: 133-137
- Levy M, Mealy M, Jarius S, et al. New Acute Severity Scale for Neuromyelitis Optica Relapses (P5.249). *Neurology* 2015; **84**(14 Supplement): P5.249.

