



Investigación liderada por la Dra Cecilia Quarracino (medica neuróloga, laboratorio de Citoarquitectura y Plasticidad Neuronal UAI-CONIECT) como parte de su doctorado en Medicina. Los autores están nombrados abajo. Fue realizada en colaboración con la Clínica de Esclerosis Lateral Amiotrófica de la División Neurología del Hospital Ramos Mejía y el Laboratorio de Citoarquitectura y Plasticidad Neuronal.

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PP.116

## PP.116 - Frequency and Evolution of Orthostatic Hypotension in the PRO-ACT Database

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**Purpose:** To explore the frequency and evolution of orthostatic hypotension in a large sample of amyotrophic lateral sclerosis patients.

**Methods:** We retrieved data from 1240 amyotrophic lateral sclerosis patients with blood pressure and heart rate measurements before and after standing at baseline and during the follow-up from the PRO-ACT database. Epidemiological, disease-related variables and simultaneous medications were considered as prognostic variables. Orthostatic hypotension was defined as a fall in systolic and/or diastolic blood pressure > 20/10 mm Hg within the first 3 minutes after standing. Neurogenic orthostatic hypotension was considered when the heart rate surge was below 15 beats per minute in patients not taking medications that could prevent a compensatory heart rate response.

**Results:** 779 patients were male (62.8%), 54±12 years old. The median follow-up period was 8.8 months. None were being treated for orthostatic hypotension, 1014 (81.8%) were taking orthostatic hypotension-related medication, and 166 (13.4%) were taking medication that might modify the heart rate response. At baseline, 138 (11.1%) patients showed orthostatic hypotension, 76.1% of whom had neurogenic orthostatic hypotension. Likewise, 163 patients showed orthostatic hypotension at follow-up (13.1%), 71.2% of whom had neurogenic orthostatic hypotension. Only 22.5% of the patients with orthostatic hypotension at baseline had orthostatic hypotension at follow-up. The baseline frequency of orthostatic hypotension or neurogenic orthostatic hypotension did not change over follow-up.

**Conclusion:** The constancy in the 11%-13% basal frequency of orthostatic hypotension over an 8-month median follow-up suggests no association with amyotrophic lateral sclerosis progression in a large sample of middle-aged patients.

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**POSTER PRESENTATION INFORMATION**

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Full or partial title at the time of presentation: \_\_\_\_\_  
Time slot: \_\_\_\_\_

Abstract (ALS) is a neurodegenerative disease classically believed restricted to the motor pathway. However, there is no consensus about the existence of autonomic dysfunction. The lack of homogeneity was compensated by correcting the degrees of freedom in the t-test. Fisher's exact test was used to measure the association between two categorical variables if two or more cells had fewer than 5 cases. The McNemar's test was used for dependent samples comparison. The level of significance was conventionally set at 0.05 (IBM SPSS v21 software, NY, USA).

**Methods**

We retrieved data from 1240 ALS patients with blood pressure and heart rate measurements before and after standing at baseline and during the follow-up from the PRO-ACT database. Epidemiological, disease-related variables and simultaneous medications were considered as prognostic variables.

Healthy individuals of similar age and gender were obtained from the PPMI (Parkinson's Progression Markers Initiative) and were used as controls (n=108).

**Frequency and evolution of orthostatic hypotension in the PRO-ACT database**

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**Introduction**

Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disease classically believed restricted to the motor pathway. However, there is no consensus about the existence of autonomic dysfunction. The lack of homogeneity was compensated by correcting the degrees of freedom in the t-test. Fisher's exact test was used to measure the association between two categorical variables if two or more cells had fewer than 5 cases. The McNemar's test was used for dependent samples comparison. The level of significance was conventionally set at 0.05 (IBM SPSS v21 software, NY, USA).

**Methods**

We retrieved data from 1240 ALS patients with blood pressure and heart rate measurements before and after standing at baseline and during the follow-up from the PRO-ACT database. Epidemiological, disease-related variables and simultaneous medications were considered as prognostic variables.

Healthy individuals of similar age and gender were obtained from the PPMI (Parkinson's Progression Markers Initiative) and were used as controls (n=108).

**Results**

779 patients were male (62.8%), 54±12 years old, 1161 (95%) of white race. The median follow-up period was 8.8 months (interquartile range 3.79). Missing data: time since symptom's onset, form of onset, ALS-PFR, comorbidities or forced vital capacity.

**Conclusion:** The constancy in the 11%-13% basal frequency of orthostatic hypotension over an 8-month median follow-up suggests no association with amyotrophic lateral sclerosis progression in a large sample of middle-aged patients.