Inside minds, beneath diseases: social cognition in amyotrophic lateral sclerosis-frontotemporal spectrum disorder

By: Lillo, P (Lillo, Patricia)[1,2,3]; Caramelli, P (Caramelli, Paulo)[4,5]; Musa, G (Musa, Gada)[6]; Parrao, T (Parrao, Teresa)[7]; Hughes, R (Hughes, Ricardo)[3,8]; Aragon, A (Aragon, Andres)[1,9]; Valenzuela, D (Valenzuela, Daniel)[1,9]; Cea, G (Cea, Gabriel)[10]; Aranguiz, R (Aranguiz, Rafael)[11]; Guimaraes, HC (Guimaraes, Henrique Cerqueira)[4] ...More

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Abstract

Objective

To compare social cognition performance between patients with amyotrophic lateral sclerosis (ALS) and those patients with behavioural variant frontotemporal dementia (bvFTD).

Methods

We included 21 participants with ALS, 20 with bvFTD and 21 healthy controls who underwent a comprehensive cognitive battery, including the short version of the Social Cognition and Emotional Assessment (Mini-SEA), which comprises the faux pas test and Facial Emotion Recognition Test (FERT); Mini-Mental State Examination; Frontal Assessment Battery; lexical fluency (F-A-S), category fluency (animals/minute), digit span (direct and backwards) tests and the Hayling test. A post hoc analysis was conducted with the patients with ALS divided into two subgroups: patients without cognitive impairment (ALScn; n=13) and patients with cognitive impairment (ALSci; n=8).

Results

No significant difference was noted between participant groups in terms of the age, sex and education. ALS-total group and patients with bvFTD had similar disease durations. Patients with ALSci performed poorly when compared with controls with regard to the FERT ($p<0.001$), the faux pas ($p<0.004$) and the Mini-SEA ($p<0.002$) total scores. Moreover, patients with bvFTD performed poorly in comparison with

controls in executive and social cognition tests. The performance of patients with ALSci was similar to that of patients with bvFTD, while the performance of patients with ALScn was similar to that of controls.

Discussion

Our findings support a cognitive continuum between ALS and bvFTD and shed light on the cognitive heterogeneity of ALS, expanding its possible neuropsychological profiles.

Keywords

Author Keywords: frontotemporal dementia; ALS; cognition; motor neuron disease
KeyWords Plus: BEHAVIORAL VARIANT; DIAGNOSTIC-CRITERIA; ALS; DEFICITS; DEMENTIA; METAANALYSIS; PROFILE

Author Information

Reprint Address:
Universidad de Chile Univ Chile, Fac Med, Dept Neurol Sur, Sch Med, Santiago, Region Metropol, Chile.
Corresponding Address: Lillo, P (corresponding author)

Univ Chile, Fac Med, Dept Neurol Sur, Sch Med, Santiago, Region Metropol, Chile.

Addresses:

[1] Univ Chile, Fac Med, Dept Neurol Sur, Santiago, Region Metropol, Chile

[2] Agencia Nacl Invest & Desarrollo ANID, Gerosci Ctr Brain Hlth & Metab GERO, Santiago, Region Metropol, C

[3] Hosp San Jose, Serv Salud Metropolitano Sur, Unidad Neurol, Santiago, Region Metropol, Chile

[4] Univ Fed Minas Gerais, Programa Posgrad Neurociencias, Belo Horizonte, MG, Brazil

[5] Univ Fed Minas Gerais, Fac Med, Dept Clin Med, Behav & Cognit Neurol Res Grp, Belo Horizonte, MG, Brazil

[6] Univ Chile, Neuropsychol & Clin Neurosci Lab LANNEC, Physiopathol Dept, ICBM,Neurosci Dept,Fac Med, S

[7] Univ Alberto Hurtado, Fac Psicol, Santiago, Chile

[8] Hosp Clin Univ Chile, Dept Neurol & Neurocirugia, Unidad Neuromuscular, Santiago, Chile

[9] Complejo Asistencial Barros Luco, Serv Neurol, Santiago, Region Metropol, Chile

[10] Univ Chile, Ciencias Neurol Oriente, Fac Med, Santiago, Chile

[11] Inst Nacl Geriatria, Santiago, Chile

[12] Santa Casa BH Ensino & Pesquisa, Belo Horizonte, MG, Brazil

[13] Univ Texas Hlth Sci Ctr Houston UTHlth, McGovern Med Sch, Dept Psychiat & Behav Sci, Neuropsychiat Pro

[14] Hosp Salvador, Memory & Neuropsychiat Clin CMYN East Neurol Dept, Santiago, Chile

[15] Univ Chile, Santiago, Chile

[16] Univ Chile, Ctr Adv Res Educ CIAE, Santiago, Chile

[17] Clin Alemana Univ Desarrollo, Dept Med, Serv Neurol, Santiago, Chile

[18] Univ Chile, Fac Med, Dept Neurociencia, Santiago, Chile

E-mail Addresses:pclz@uchile.cl

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