

et al. to read these articles, and congratulate them on their excellent study. We look forward to meeting these authors at a medical conference to further discuss these topics in person.

References

1. Toribio-Díaz ME, Medrano-Martínez V, Moltó-Jordá JM, Beltrán-Blasco I. Red de cuidadores informales de los pacientes con demencia en la provincia de Alicante, descripción de sus características. *Neurología*. 2013;28:95–102.
2. Rivera-Navarro J, Bermejo-Pareja F, Franco M, Morales-González JM, Benito-León J. Understanding care of people with dementia in Spain: Cohabitation arrangements, rotation and rejection to long term care institution. *Int J Geriatr Psychiatry*. 2009;24:142–8.
3. Bermejo F, Rivera J, Trincado R, Olazarán J, Fernández C, Gabriel R. Aspectos del cuidado socio-familiar al paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. I. Metodología y análisis de la problemática sociofamiliar de los dementes. *Rev Gerontol*. 1997;7:92–9.
4. Rivera J, Bermejo F, Trincado R, Morales JM. Aspectos del cuidado socio-familiar al paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. II. Aspectos específicos del cuidado familiar. *Rev Gerontol*. 1997;7:138–47.
5. Bermejo F, Rivera J, Trincado R, Olazarán J, Morales JM. Problemas sociales y familiares del paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. Madrid: Díaz de Santos; 1998.
6. Rivera JN. Redes familiares en el cuidado del anciano con demencia. Análisis evolutivo de un estudio poblacional. Madrid: Consejo económico y social. Comunidad de Madrid; 2001.

J. Rivera-Navarro^a, J. Benito-León^{b,*}

^a *Departamento de Sociología, Universidad de Salamanca, Salamanca, Spain*

^b *Servicio de Neurología, Hospital Universitario 12 de Octubre, Madrid; Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid; Departamento de Medicina, Facultad de Medicina, Universidad Complutense, Madrid, Spain*

* Corresponding author.

E-mail address: jbenitol@meditex.es (J. Benito-León).

Reply to “Characteristics of informal caregivers of patients with dementia in Alicante province”[☆]

Red de cuidadores informales de los pacientes con demencia en la provincia de Alicante, descripción de sus características. Réplica

Dear Editor,

We would like to thank Rivera-Navarro and Benito-León for their suggestions concerning our article titled “Characteristics of informal caregivers of patients with dementia in Alicante province”.¹ We agree that these suggestions enrich the discussion and reflections on informal care for dementia patients.

However, the environment surrounding dementia patients is so complex that we deemed it more appropriate to focus on describing the profiles and roles of the different types of caregivers of these patients. We believe that ours is a novel objective since it goes beyond merely describing primary caregivers, and this is why we did not consider or analyse the care-related costs of these patients. We did find it striking, however, that very few caregivers in our study left their jobs or were obliged to reduce their working hours in order to care for patients. This may be due to the presence of a generation of women, middle-aged

at present, whose cultural background has led them to be home-makers and, by extension, also caregivers.^{2–5} In any case, we would like to thank Rivera-Navarro and Benito-León for the recommended readings,^{6–10} which add to our general knowledge of and interest in dementia, and also constitute a useful source of data for subsequent studies.

As these authors rightly explain, rotation is a care model for dementia patients that is largely restricted to Mediterranean countries⁶; in northern European countries, it appears that formal care is much more common.¹¹ Likewise, we were surprised to find such a small number of patients with this type of care model in our study¹ compared to the one by Rivera-Navarro et al.⁶ We must stress, however, that the two studies are not comparable due to the differences in the number of patients/caregivers. Furthermore, in contrast with the article mentioned above, our main purpose was not to describe the reasons why patients live at home rather than rotating between different relatives’ households.

In conclusion, we appreciate our colleagues’ suggestions and their interest in our study, since they enrich our knowledge of a complex disease affecting not only patients, but also a network of informal or supporting caregivers that grows as our society evolves.^{12,13}

References

1. Toribio-Díaz ME, Medrano-Martínez V, Moltó-Jordá JM, Beltrán-Blasco I. Red de cuidadores informales de los pacientes con demencia en la provincia de Alicante, descripción de sus características. *Neurología*. 2013;28:95–102.
2. Turró-Garriga O, López-Pousa S, Vilalta-Franch J, Turon-Estrada A, Pericot-Nierga I, Lozano-Gallego M, et al. Valor económico anual de la asistencia informal en la enfermedad de Alzheimer. *Rev Neurol*. 2010;51:201–7.

DOI of refers to article: <http://dx.doi.org/10.1016/j.nrleng.2013.03.008>

[☆] Please cite this article as: Toribio Díaz ME, Medrano Martínez V, Moltó Jordá JM, Beltrán Blasco I. Red de cuidadores informales de los pacientes con demencia en la provincia de Alicante, descripción de sus características. Réplica. *Neurología*. 2015;30:184–185.

3. García-Calvente M, Mateo-Rodríguez I, Maroto-Navarro G. El impacto de cuidar en la salud y la calidad de vida de las mujeres. *Gac Sanit.* 2004;18:83–92.
 4. La Parra D. Contribución de las mujeres y los hogares más pobres a la producción de cuidados de salud informales. *Gac Sanit.* 2001;15:498–505.
 5. Garre-Olmo J, Hernández-Ferrándiz M, Lozano-Gallego M, Vilalta-Franch J, Turón-Estrada A, Cruz-Reina MM, et al. Carga y calidad de vida en cuidadores de paciente con demencia tipo Alzheimer. *Rev Neurol.* 2000;31:522–7.
 6. Rivera-Navarro J, Bermejo-Pareja F, Franco M, Morales-González JM, Benito-León J. Understanding care of people with dementia in Spain: cohabitation arrangements, rotation and rejection to long term care institution. *Int J Geriatr Psychiatry.* 2009;24:142–8.
 7. Bermejo F, Rivera J, Trincado R, Olazarán J, Fernández C, Gabriel R. Aspectos del cuidado socio-familiar al paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. I. Metodología y análisis de la problemática sociofamiliar de los dementes. *Rev Gerontol.* 1997;7:92–9.
 8. Rivera J, Bermejo F, Trincado R, Morales JM. Aspectos del cuidado sociofamiliar al paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. II. Aspectos específicos del cuidado familiar. *Rev Gerontol.* 1997;7:138–47.
 9. Bermejo F, Rivera J, Trincado R, Olazarán J, Morales JM. Problemas sociales y familiares del paciente con demencia. Datos de un estudio poblacional en dos zonas de Madrid. Madrid: Díaz de Santos; 1998.
 10. Rivera JN. Redes familiares en el cuidado del anciano con demencia. Análisis evolutivo de un estudio poblacional. Madrid: Consejo económico y social. Comunidad de Madrid; 2001.
 11. Gustavsson A, Jonsson L, Rapp T, Reynish E, Ousset PJ, Andrieu S, et al. Differences in resource use and costs of dementia care between European countries: baseline data from the Ictus Study. *J Nutr Health Aging.* 2012;14:648–54.
 12. Sabater P, López G. Demencias: impacto familiar y prevención del síndrome del cuidador. *Rev Enferm.* 1998;243:21–6.
 13. Juvel-Negro M. Dependencia y cuidado: implicaciones y repercusiones en la mujer cuidadora. *Acciones Investig Soc.* 2006;261–2.
- M.E. Toribio Díaz^{a,*}, V. Medrano Martínez^b,
J.M. Moltó Jordá^c, I. Beltrán Blasco^d
- ^a Sección de Neurología, Hospital Universitario del Henares, Coslada, Madrid, Spain
^b Sección de Neurología, Hospital Virgen de la Salud, Elda, Alicante, Spain
^c Sección de Neurología, Hospital Virgen de los Lirios, Alcoi, Alicante, Spain
^d Consulta de Neurología, Hospital Clínica Benidorm, Benidorm, Alicante, Spain
- *Corresponding author.
 E-mail address: etoribiod@hotmail.com (M.E. Toribio Díaz).

Harlequin syndrome, a rare neurological disease[☆]

Síndrome de Arlequín, una rareza neurológica

Dear Editor,

In 1988, Lance et al.¹ described a syndrome consisting of unilateral facial flushing and sweating triggered by exercise or hot weather. They called it 'Harlequin syndrome' (HS) based on Harlequin, a *Commedia dell'Arte* character. As a general rule, HS is a benign condition caused by a dysfunction in the upper thoracic sympathetic pathway. When it affects the first thoracic segment (T1), it is associated with ipsilateral Horner syndrome due to oculosympathetic fibre involvement. HS is a rare disease affecting autonomic innervation. Although benign in most cases, it is extremely distressing for patients and a diagnostic challenge for doctors.

We present the case of a 54-year-old woman with longstanding right palpebral ptosis. She had no relevant personal or family history. Approximately 4 years earlier, she had noticed a narrowing of the right palpebral fissure, which was sometimes more pronounced with no apparent trigger factor. She had never experienced diplopia, dysphagia, excessive limb fatigue, or any other signs or symptoms

suggesting a neuromuscular disease. The patient's medical records reported a 15-year history of left-sided facial flushing and profuse sweating with the right side of the face remaining pale and dry (Fig. 1). These episodes were triggered by physical exercise and were especially noticeable in hotter settings. The patient described a distinct frontier between the two halves of her face, and regarded the prominent left-sided facial flushing as a source of social embarrassment. Physical examination revealed mild right palpebral ptosis and slight anisocoria with right miosis. Irises were the same colour, and pupillomotor response was normal. Results from the general and neurological examinations were normal. In light of the above, we suspected a lesion in the sympathetic pathway affecting vasomotor and sudomotor fibres in the right side of the face (consistent with HS), possibly associated with Horner syndrome. Results from the analyses (complete blood count, erythrocyte sedimentation rate, glucose test, a serum electrolyte study, renal and thyroid function studies, etc.) were normal. Neuroimaging studies (cranial and cervical MRI, duplex Doppler ultrasonography of the supra-aortic trunks, and thoracic computerized tomography) showed no relevant abnormalities. A negative apraclonidine test ruled out Horner syndrome. However, instillation of phenylephrine 10% reversed ptosis, and the patient was diagnosed with aponeurotic ptosis (Fig. 2). Once we determined the patient showed no structural changes, she was diagnosed with idiopathic HS and informed that it was a benign condition requiring no treatment. The patient was also offered surgical treatment for the aponeurotic ptosis but she refused since the condition was not functionally debilitating.

[☆] Please cite this article as: Zabalza Estévez RJ, Unanue López F. Síndrome de Arlequín, una rareza neurológica. *Neurología.* 2015;30:185–187.