

THE ANDALUSIAN “MULTIPLEX FAMILIES WITH BIPOLAR DISORDER “: A REVALUATION OF THE COHORT STUDY (1997-2013).

José Guzmán¹, Fermín Mayoral¹, Berta Moreno-Kústner¹, Fabio Rivas¹, Pablo Romero¹, Eudoxia Gay², Maria José González³, Susana Gil⁴, Francisco Cabaleiro², Francisco del Río⁵, Fermín Pérez⁶, Jesús Haro⁷, Markus Nöthen⁸, Fabian streit⁹, Jana Strohmaier⁹, Marcela Rietschel⁹.

1. University Regional Hospital of Malaga Spain. Biomedicine Institute of Malaga (IBIMA).
2. University Hospital Reina Sofía, Spain; Province Hospital, Cordoba, Spain.
3. Mental Health Care Centre Lucena, Spain; Province Hospital, Cordoba, Spain.
4. Mental Health Care Centre Montoro, Spain; Province Hospital, Cordoba, Spain.
5. Mental Health Care Centre de San Dionisio Jerez de la Frontera Cádiz, Cadiz, Spain.
6. Unidad de Rehabilitacion de Area, Puerto de Santamaría Cádiz, Cadiz, Spain.
7. Mental Health Care Centre Algeciras Cádiz, Cadiz, Spain.
8. University of Bonn, Institute of Human Genetics, Germany.
9. Central Institute of Mental Health, University of Heidelberg. Mannheim, Germany

Objectives.

Bipolar disorder (BD) is highly heritable, and gene identification will elucidate biological factors and gene-environment interactions. Multiplex families represent a promising resource for identifying rare variants and polygenic effects. However, such families are difficult to recruit.

In 1997, >100 multiplex Andalusian BD pedigrees - the largest of which contains >20 affected members- were recruited within an Andalusian-German collaboration study. Since then, the Andalusian psychiatric network and biobank facilities have been expanded in order to facilitate psychiatric research. Therefore in 2013, the Andalusian-German collaborators initiated a follow-up study of this cohort in order to identify new genetic and environmental factors for BD aetiology and clinical course.

Methods.

In 1997, BD patients at Andalusian psychiatric hospitals who reported a family history of BD were asked to inform their families about the study. All consenting family members (N= 937; BPI/II=265; Recurrent Major Depression=149) were assessed using a structured psychiatric interview for life-time best estimate psychiatric diagnosis

(SADS) and the family history method, and blood was obtained for DNA genetic analysis.

Follow-up involves reassessment of diagnosis, neuropsychological testing (CANTAB), and the collection of biomaterials (RNA, Plasma, IPS, hair cortisol, etc.). Written informed consent is obtained for all study procedures and analyses.

Results.

For the first three families, follow-up assessments and biomaterial-processing have been completed. Follow-up of the remaining families is ongoing.

Conclusion.

This cohort represents a unique resource for the investigation of BD aetiology and clinical course, and will be available to international researchers from other sciences.