P-493 - RELATION BETWEEN SALIVARY CORTISOL LEVELS AND CORTICOTROPHIN RELEASING HORMONE RECEPTOR 1 (CRHR1) WITH ANTIDEPRESSANT RESPONSE TO FLUOXETINE IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER

L.M.Herrera[1], A.Symon[1,2], C.Heskia[1,3], P.Lara[4], F.Marin[4], V.Guajardo[4], G.Rojas[4], V.Araya[5], J.L.Fiedler[6]

[1]Programa de Genética Humana, ICBM, [2]Escuela de Tecnología Médica, Facultad de Medicina, Universidad de Chile, [3]Facultad de Medicina, Universidad de Los Andes, [4]Departamento de Psiquiatría y Salud Mental, Hospital Clínico, Universidad de Chile, [5] Endocrinologia, Hospital Clinico Jose Joaquin Aguirre, Universidad de Chile, [6]Departmento de Bioquímica y Biología Molecular, Facultad de Química y Farmacia, Universidad de Chile, Santiago, Chile

Major depressive disorder is a serious mental disorder with high prevalence and recurrence rate. Once depression is diagnosed, effective pharmacological treatments must be rapidly initiated. Depression etiology and responsiveness to antidepressants have been related to the activity of the hypothalamic-pituitary-adrenal (HPA) axis. Depressed subjects do not respond equally to the same drug. This variability could be explained by interindividual genetic differences related to HPA axis, including CRHR1 receptor.

Objectives: To associate the salivary cortisol levels, prior to antidepressant treatment, and the CRHR1 rs242939 polymorphism with the response to therapy with fluoxetine.

Methods: We performed a pharmacogenetic prospective longitudinal study including clinic follow-up, endocrine and genetic evaluations. After diagnosis, patients started the pharmacotherapy. The severity of the disease and clinical response were evaluated by the Hamilton Depression Rating Scale (HAM-D). Rapid and slow responses were considered as reductions in the HAM-D scores of at least 50% at the third and eight weeks respectively.

Results: 157 patients were recruited. Salivary cortisol levels at 8:00AM were lower in rapid responders than in not responders (p-value = 0.0122). No differences were observed after eight weeks of treatment. The rs242939 polymorphism was in Hardy Weinberg equilibrium (p=0,24) and was significantly associated with early response (p= 0.019). There was no association after two month of therapy.

Discussion and conclusions: Alterations in the CRHR1 receptor may significantly impact the regulation of stress response. The association observed in this study may be related with some refractoriness in the regulation of CRHR1 gene in non responders.

Supported: By Fondecyt 1090219.

https://doi.org/10.1016/S0924-9338(12)74660-6 Published online by Cambridge University Press