P-492 - ANALYSIS OF ASSOCIATION SEROTONIN TRANSPORTER GENE AND ANTIDEPRESSANT RESPONSE TO CITALOPRAM IN IRANIAN MAJOR DEPRESSIVE POPULATION

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Introduction: Serotonin systems play a key role in the pathogenesis of major depression, SSRIs drugs are the first step in its treatment. Serotonin transporter (5HTT) gene is known as the responsible gene for Major Depression Disorder. Deletion or insertion in the 5-HTTLPR creates short and long alleles. Detecting the genotype regulatory region in (5HTT) can be useful and individual for everybody antidepressant treatment.

Objectives: Western reports have demonstrated that l allele is associated with better SSRIs anti depressive effects than the s allele. Study of a Korea had contrasting finding.

Aims: There is association between treatment outcome phenotypes and HTTLPR in Iranian Major Depressive Population.

Method: In this study, 105 patients with MDD (according by DSM-IV-TR) treated by Citalopram .On the other hand genotyping for alles of 5HTT and level of drug serum was obtained. Beck depression test was done in the first, 4th and 8th week. Dose Citalopram was 20-60 mg/D .Lack of clinical response was studied with mental state and Beck Depression test, then if there was no response the drug changed .(after 4 weeks).

Results: In Iranian patients frequency of each allele base on the population study is near to 0.5 (L: 0.48 and S: 0.52). 69% of the patients with allele L (L/L or L/S) respond to Citalopram, while just 44% of the S/S patients did not need to change the drug.

Conclusion: our study confirms the hypothesis that the L allele is associated with better response to antidepressant drug (P value=0.033. CI: 95%).