



**Acquired
Brain Injury
Network**

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Conference Presentation Abstract ~ Poster

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Title:

The Serotonin Transporter Polymorphisms and Major Depression following Traumatic Brain Injury

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Summary:

Objective: The purpose of this study was to examine the role of the serotonin transporter gene polymorphisms on the risk of major depression following traumatic brain injury (TBI).

Methods: Seventy-five patients who had sustained a TBI and who met the Diagnostic and Statistical Manual of Mental Disorders (4th ed.) (DSM-IV) criteria for mood disorder due to TBI were compared to 99 controls with TBI but no mood disorder. The severity of depression was rated using the Hamilton Depression Rating Scale (HAMD) for the depressed patients. All patients were genotyped for the serotonin transporter gene-linked polymorphic region (5-HTTLPR) with the assay for the rs25531 allelic variant.

Results: The distribution of genotype frequencies was not different between the depressed and control groups ($\chi^2 = 1.43$, $df=2$, $p=0.488$), and for the depressed patients, there was no association between HAMD scores and the polymorphisms (t -test=1.71, $df=68$, $p=.092$).

Conclusion: There was no evidence of association between the serotonin transporter gene polymorphisms and depression post-TBI. Future research is indicated into the possible role of other candidate genes as risk factors for depression in this population.

Outcomes/Objectives:

To learn about our recent research study of the genetic association with depression following traumatic brain injury.