

Approaching mild to moderate traumatic brain injury, cognitive impairment has been linked to major melancholy.

Fen Ju*

Department of Neurosurgery, Ningbo Medical Center Lihuli Hospital, 1111 Jiangnan Road, Ningbo 315040, Zhejiang Province, PR China

Received: 05-Jan-2022, Manuscript No. AAJNNR-22-105; Editor assigned: 07-Jan-2022, Pre QC No. AAJNNR-22-105(PQ); Reviewed: 21-Jan-2022, QC No. AAJNNR-22-105;

Revised: 24-Jan-2022, Manuscript No. AAJNNR-21-105(R); Published: 31-Jan-2022, DOI: 10.35841/aaajnnr-7.1.105

Introduction

Traumatic brain injury (TBI) and serious depression are two neuropsychiatric disorders that were linked to memory loss. The goal of this research was to see if there was a link between significant depression and cognitive impairment after a mild cases TBI. A incidence of significant depression was assessed in 74 TBI patients utilising the Structured Clinical Interview for the DSM-IV, as well as a neurocognitive testing panel. Subjects with serious depression (28.4%) had considerably poorer results on measures of working memory, processing speed, verbal memory, and executive control than those without. The signaling pathways and treatment implications are examined [1,2].

Patient selection

A prevalence of significant depression and cognitive abnormalities was investigated in a sample of 74 patients attending a TBI clinic in a large general hospital. Subjects were under the age of 65 and had suffered a mild or moderate nonpenetrating TBI. The American Congress of Rehabilitation Medicine classified mild TBI as a lack or modification of consciousness for 30 minutes or less at the moment of injury, an initial Glasgow Coma Scale score of 13–15, and posttraumatic amnesia lasting or less hours [3].

Records on demographics, previous health, and injuries

Age, sex, marital status, education background, past medical history, use of alcohol and other substances, family psychiatric history, and prior diagnosis of mood disorder were among the details collected. The origin of a incident, the duration of loss of consciousness, the initial Glasgow Coma Scale score in the emergency room, the duration of posttraumatic amnesia, the presence of other musculoskeletal injuries, and the results of the brain CT scan were all documented [4].

A diagnosis of severe depression

The depression module of the Structured Clinical Interview for DSM-IV Axis I Disorders was used to assess subjects for the existence of a major depressive episode by a psychiatrist who was blind to the cognitive data (SCID). In TBI samples, 20 DSM criteria are judged credible and valid.

Cognition and major depression

Regarding measures of working memory, processing speed, and verbal memory, subjects with serious depression had significantly lower scores, indicating much poorer efficiency. On the Wisconsin Card Sorting Test, subjects with serious depression had considerably more perseverative replies and a trend toward poorer overall performance on this test of executive disorder. Approximately 15% of the depressed sample was classed as "damaged" on all the cognitive assessments using the established percentile limits [5].

Discussion

Merely 15% of depressed patients were unimpaired on any cognitive test, compared to more than half of those who did not have severe depression. For categorical demographic, prior illness, and injury characteristics, the chi-square statistic was used to examine individuals both with significant depression. The continuous cognitive outcome variables, as well as age and length of prediction period, were compared between groups using analysis of variance.

Conclusion

The results are consistent with research in the primary major depression literature that show cognitive abnormalities. However, in that trial, data on category "impairment" was not supplied, and participants with general trauma as well as those with TBI were merged. Furthermore, in that study, the prevalence of significant depression after injury was only 12%, which is lower than previously reported percentages with in field.

References

1. Rapoport M, McCullagh S, Streiner D, et al. The clinical significance of major depression following mild traumatic brain injury. *Psychosomatics*. 2003;44:33-37.
2. Jorge RE, Robinson RG, Arndt SV, et al. Depression following traumatic brain injury: a 1 year longitudinal study. *J Affect Disord*. 1993;27:233-43.
3. Brooks N, McKinlay W, Symington C, et al. Return to work within the first seven years of severe head injury. *Brain Inj*. 1987;1:5-19.

4. Wiegner S, Donders J. Performance on the California Verbal Learning Test after traumatic brain injury. *J Clin Exp Neuropsychol.* 1999;21:159-70.
5. Stuss DT, Ely P, Hugenholtz H, et al. Subtle neuropsychological deficits in patients with good recovery after closed head injury. *Neurosurgery.* 1985;17:41-47.

***Correspondence to:**

Fen Ju
Department of Neurosurgery,
Ningbo Medical Center Lihuili Hospital,
Zhejiang Province, PR China
E-mail: fenju@163.com