

Research Psychology Masters, University of Witwatersrand



Cognitive functioning and psychological distress in patients with liver disease

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Declaration

I declare that this research project is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university

Word count: _____

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27/07/2015

Date

Abstract

It is well established in international literature that patients with end stage liver disease (ESLD) commonly develop a subtle form of neuropsychological dysfunction, known as minimal hepatic encephalopathy (MHE). MHE is characterised by subtle deficits in attention, visuospatial construction, psychomotor speed and executive function which are detected through neuropsychological testing. Patients with MHE are inclined to develop overt hepatic encephalopathy (HE) as ESLD severity increases. Furthermore, patients who undergo a successful liver transplant (LT) have been found to show significant improvements in cognitive functioning. However, the findings of previous studies have been inconsistent. As MHE is not being detected in South Africa, barring for the Wits University Donald Gordon Medical Centre (WDGMC), it is impossible to transpose the findings of the previous studies to the South African context. In the present study, 13 patients on the waiting list for a LT as well as 18 patients who had previously undergone an LT at the WDGMC were examined for their level of cognitive functioning on 3 neuropsychological assessments, namely the Repeatable Battery of Neuropsychological Status, the Cognitive Trail Making Test and the Stroop Effect Test. The same patients additionally were investigated for their level of psychological distress. The current study found that patients who are currently awaiting a LT have a progressed deficit in the index of attention from their initial test to a six month follow up. Patients who had undergone a LT, appeared to have improved areas in attention yet a deficit remained in visuospatial construction. Similarly, patients who had undergone a LT showed significantly higher levels of attention compared to patients on the waiting list for a LT.

Dedication

“The fact that the mind rules the body is, in spite of its neglect by biology and medicine, the most fundamental fact which we know about the process of life.”

~Franz Alexander

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