Cognitive function
in hepatitis C patients
: Effect of pegylated interferon alpha and ribavirin therapy

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M. D. 2010

Is to detect cognitive dysfunction in patients with HCV treated with peg-IFNJ/RBV therapy.
Sixty Male and female patients from Ain Shams University Hospital with age ranging from 18-60 years old diagnosed as Hepatitis C by PCR with moderate viremia and having normal thyroid profile were recruited in this study after obtaining verbal consent following explanation of study protocol 40 patients were treated with peg-IFNJ/RBV (Group A) nevertheless, 10 patients dropped out for different reasons, so group A actually included 30 patients. On the other hand, the remaining 20 patients were not receiving the same treatment due to lack of funding from their health Insurance System (Group B). On the 24th week of peg-IFNJ/RBV therapy, all patients underwent laboratory investigations, abdominal ultrasonography, neuropsychological assessment including Wechsler Adult Intelligence scale, Wechsler Memory Scale?Revised (WMS-R) and Benton Visual retention Test. Patients were also interviewed using the Beck Depression Inventory (BDI), patients scoring more than 10 in BDI were excluded to eliminate the impact of depressive symptomatology on cognitive function. Hence the final sample was.
As adverse effect of administration of Peg Interferon, leucopenia, mild normocytic normochromic anemia and mild increase in the liver function were found in group A. Mean total IQ, Performance IQ and Verbal IQ scores were found to be less in patients group with a significant statistical difference between both groups (p=0.017) regarding total scores and performance scores had a high statistical significant difference (p=0.005) between groups. Highly statistical significant difference (p=0.000) was found between both groups regarding perception and long term memory as assessed by picture completion, and a high statistical significant difference (p=0.037) was found between both groups regarding Visuo-motor coordination as assessed by Block design. However sustained attention as measured by Digit symbol was not different statistically despite that patients on Interferon were scoring less in this test. On the other hand, abstract thinking as measured by similarities has been found to be affected having a significant statistical difference (p=0.013) between both groups as measured by Similarities testing.
Cognitive Dysfunction is found to be a common problem in Hepatitis C patients and is found to be aggravated during treatment with Pegylated Interferon. These findings draw clinicians? attention to the importance of cognitive functions assessment in all hepatitis C patients at time of diagnosis and regular follow up is needed to detect mild cognitive impairment to allow early intervention to reduce the severity of cognitive dysfunction.