

# **Subclinical hepatic encephalopathy : The role of neuropsychological and electrophysiological tools in diagnosis**

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Subclinical hepatic encephalopathy (SHE) indicates cognitive deficits in the absence of overt encephalopathy. It is frequently found in patients with cirrhosis.

SHE prevalence depends on the diagnostic procedures used in its detection but there is not yet a standardized method for its diagnosis. 40 cirrhotic patients {20 patients with overt hepatic encephalopathy (HE) and 20 patients with no encephalopathic manifestations (NE)} and 25 healthy controls were studied in this work for the prevalence of neuropsychologic and neuropsychological abnormalities. A battery of psychometric tests (Digit Span test (DS), Similarities, Digit Symbol Test (DST), Block Design (BD) and Mini Mental State Examination (MMSE) and a neurophysiologic test (Electroencephalography (EEG) were used in this work. Results revealed significant difference between patients groups (NE and HE) and normal controls and in the DS test ( $P < 0.02$ ). Also, a significant difference has been found between the two patients groups (NE and HE) in the DS test (20% and 30% respectively), DST (25% and 40% respectively) and MMSE (15% and 25% respectively) tests ( $P < 0.02$ ,  $< 0.001$  and  $< 0.001$  respectively). EEG showed abnormalities in 8 NE patients (40%) classified as mild and in 16 HE patients (80%) classified as moderate (60%) and mild (20%).

In conclusion, this work shows that the neuropsychological tests are of importance in the diagnosis of SHE, as they are simple, easy to perform, and suitable to be applied to outpatient hepatic clinics.