

# **A single photon emission computerized tomography study in post-concussional syndrome**

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This study aimed to detect the possible correlation between regional cerebral blood flow changes and post-concussional symptoms, the possible accident variables and different demographic data aiming to determine the extent of damage or organicity with these variables.

The samples composed of 20 patients, fulfilling the criteria for the diagnosis of post-concussion syndrome according to ICD-10 diagnostic criteria for research. All patients were right handed and free from medication for at least two weeks before SPECT. The control group consisted of 12 individuals with no apparent physical or psychiatric morbidity. They were matched for age, sex and other demographic variables as far as possible with the patient group. The control group was selected from the relatives of the patients. The study concluded that although abnormal cerebral blood flow was present in 70% of the cases, these abnormalities are not specific and not valid for the diagnosis of post-concussion syndrome. Brain SPECT perfusion imaging is valuable and sensitive for the evaluation of cerebral perfusion changes following mild traumatic brain injury and it is more sensitive than CT-scan in detecting brain lesions.