ASSESSMENT OF ZINC, CADMIUM, NICKEL AND CHROMIUM IN NEUROLOGICAL DISORDER PATIENTS

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The present study was designed to determine the amount of trace and toxic metals present in the blood of neurological disordered patients. The blood samples of 45 patients were collected from different hospitals of the Faisalabad in Punjab (Pakistan) and of 15 normal persons from university of Agriculture, Faisalabad to investigate the status of four trace metals viz. Zinc, Cadmium, Nickel and Chromium. The samples were analyzed for trace and toxic metals contents by atomic absorption spectrometer. The zinc was found significant in Right Parietal Infarction (RPI), Alzheimer, Right Hemiplegia (RH) and Hepatic Encephalopathy (HE) disease persons. Whereas, in Parkinson’s, Huntington’s, Epileptic Seizures (ES), Subarachnoid hemorrhage (SH), Wilson Disease (WD) and Right Hemiparesis (RH) disease persons Zn was found to be non significant. The cadmium was significant in disease persons belonging to Parkinson's, Huntington, RH, LH, SH, HE and RH Diseases. As far as Cd in RPI, Alzheimer, ES and WD persons is concerned, it was non-significant. The results of nickel were significant in Parkinson's, RPI, Alzheimer, RH, ES, LH and SH Disease persons. While these were non significant in Huntington, HE, WD and RH Diseased persons. The significant amount of chromium was observed in RPI persons only and it was non-significant in in patients of Parkinson's, Alzheimer, RH, ES, LH, SH, Huntington, HE, WD and RH diseases.

Keywords: Neurological disorder patients, trace elements analysis, Atomic absorption spectrophotometry