To Evaluate the Function of Cardiac Viability After Administration of I131

Authors : Baburao Ganpat Apte, Gajodhar

Abstract : Introduction: diopathic Parkinson's disease (PD) is the most common neurodegenerative disorder. Early PD may present a diagnostic challenge with broad differential diagnoses that are not associated with striatal dopamine deficiency. This test was performed by using special type of radioactive precursor which was made available through our logistics. 131I-TOPA L-6-[131I] Iodo-3,4-Trihydroxyphenylalnine (131I -TOPA) is a positron emission tomography (PET) agent that measures the uptake of dopamine precursors for assessment of presynaptic dopaminergic integrity and has been shown to accurately reflect the sign of nervous mind going in patients suffers from monoaminergic disturbances in PD. Both qualitative and quantitative analyses of the scans were performed. Therefore, the early clinical diagnosis alone may be accurate and this reinforces the importance of functional imaging targeting the patholigically of the disease process. The patient's medical records were then assessed for length of follow-up, response to levotopa, clinical course of sickness, and usually though of symptoms at time of 131I -TOPA PET. A respective analysis was carried out for all patients that gone through 131I -TOPA PET brain scan for motor symptoms suspicious for PD between 2000 - 2006. The eventual diagnosis by the referring neurologist, movement therapist, physiotherapist, was used as the accurate measurements in standard for further analysis. In this study, our goal to illustrate our local experience to determine the accuracy of 131I -TOPA PET for diagnosis of PD. We studied a total of 48 patients. Of the 25 scans, it found that one was a false negative, 40 were true positives, and 7 were true negatives. The resultant values are Sensitivity 90.4% (95% CI: 100%-71.3%), Specificity 100% (92% CI: 100%-58.0%), PPV 100% (91% CI 100%-75.7%), and NPV 80.5% (95% CI: 92.5%-48.5%). Result: Twenty-three patients were found in the initial query, and 1 were excluded (2 uncertain diagnosis, 2 inadequate follow-up). Twenty-eight patients (28 scans) remained with 15 males (62%) and 8 females (30%). All the patients had a clinical follow-up of at least 3 years, however the median length of follow-up was 5.5 years (range: 2-8 years). The median age at scan time was 51.2 years (range: 35-75)

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