

## Role of DatScan in the Diagnosis of Parkinson's Disease

**Authors :** Shraddha Gopal, Jayam Lazarus

**Abstract :** Aims: To study the referral practice and impact of DAT-scan in the diagnosis or exclusion of Parkinson's disease. Settings and Designs: A retrospective study Materials and methods: A retrospective study of the results of 60 patients who were referred for a DAT scan over a period of 2 years from the Department of Neurology at Northern Lincolnshire and Goole NHS trust. The reason for DAT scan referral was noted under 5 categories against Parkinson's disease; drug-induced Parkinson's, essential tremors, diagnostic dilemma, not responding to Parkinson's treatment, and others. We assessed the number of patients who were diagnosed with Parkinson's disease against the number of patients in whom Parkinson's disease was excluded or an alternative diagnosis was made. Statistical methods: Microsoft Excel was used for data collection and statistical analysis, Results: 30 of the 60 scans were performed to confirm the diagnosis of early Parkinson's disease, 13 were done to differentiate essential tremors from Parkinsonism, 6 were performed to exclude drug-induced Parkinsonism, 5 were done to look for alternative diagnosis as the patients were not responding to anti-Parkinson medication and 6 indications were outside the recommended guidelines. 55% of cases were confirmed with a diagnosis of Parkinson's disease. 43.33% had Parkinson's disease excluded. 33 of the 60 scans showed bilateral abnormalities and confirmed the clinical diagnosis of Parkinson's disease. Conclusion: DAT scan provides valuable information in confirming Parkinson's disease in 55% of patients along with excluding the diagnosis in 43.33% of patients aiding an alternative diagnosis.

**Keywords :** DATSCAN, Parkinson's disease, diagnosis, essential tremors

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