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**CLINICAL USE OF SPECT DATSCAN IN PSYCHIATRIC POPULATION: ONE-YEAR OUTCOMES OF A PROSPECTIVE CASE SERIES**

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#### INTRODUCTION

SPECT DaTSCAN is used in clinical practice for differential diagnosis between Parkinson disease and other movement disorders, dementias and drug induced parkinsonism (Park 2012, Scherfler 2007). Nevertheless, its rational indication in patients with psychiatric comorbidity has not been clearly identified.

#### OBJECTIVE

To assess the rationale for the indication of SPECT DaTSCAN in psychiatric population, explore the therapeutic consequences and clinical outcomes.

#### MATERIAL-AND-METHODS

A prospective case series of DaTSCAN applications requested from the department of psychiatry of a general hospital (2008-2012). Reason of request, sociodemographic and clinical data, side effects (UKU Rating Scale), diagnostic (DSM-IV-R) and outcome after one-year follow-up were recorded.

#### RESULTS

18 cases were included (13 hospitalized, 55.5% women, 65±13 years old). Baseline UKU showed: 89.5% bradikinesia, 68% rigidity and 31.5% tremor. The indications for DaTSCAN were: 1) Atypical extrapyramidal syndrome (AES; 55.5%) and 2) Parkinsonism presumably induced by drugs (PPID; 44.4%).

AES group (N=10): 80% of patients had an affective disorder and 20% a psychotic disorder; DaTSCAN identified three cases of Parkinson disease (30%), two non-parkinson dementia (20%) and one Huntington disease (10%).

PPID group (N=8): 50% of patients had an affective disorder and 50% a psychotic disorder; DaTSCAN identified one case of Parkinson disease (12.5%) and five of drug-induced parkinsonism (62.5%).

After one year follow-up, AES group showed a worse outcome and an important functional decline, while most of patients of PPID group experienced complete remission

#### CONCLUSIONS

The results of this study enable to establish the profile of psychiatric patients that would benefit most from DaTSCAN.