Effectivenes of Discinex® for treatment of Parkinson's disease: preliminary results

Michele Pistacchi[1], Manuela Gioulis[2], Flavio Sanson[1], Franco Feracci[2], Francesca Cappozzoli[3],Sandro Zambito Marsala[2]

1) Neurology Department, Santorso Hospital (VI), Italy 2) Neurology Department, San Martino Hospital, Belluno (BL), Italy 3) Neurology Department, St. Mary of the Angels Hospital, Pordenone, Italy

Background

Epidemiologic studies consistently link caffeine, a non selective adenosine antagonist, to lower risk of Parkinson disease (PD) but the results are inconsistent .
The inverse association between tea consumption and the risk of PD has also been found among man but not among women.

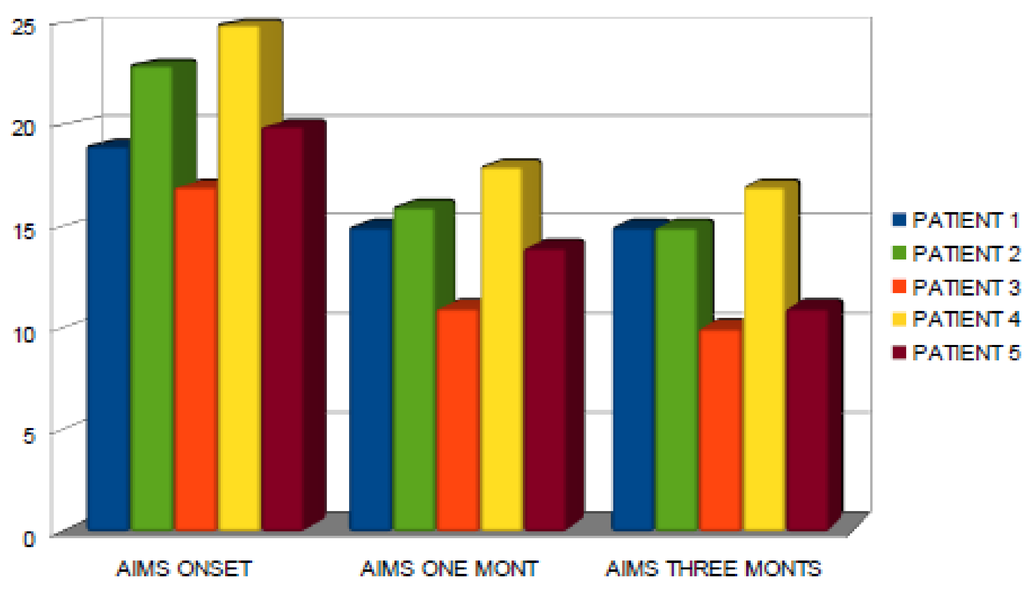
Aims

To evaluate the effectiveness of Discinex® in PD patients with dyskinesias in moderate stage of the disease evaluated and optimized the best possible medical therapy associating the administration of Discinex®. These preliminary results will present only a small group of PD patients.

Materials and Methods

The inclusion criteria was PD able Hoehn and Yahr Scale (HY) about 2 and 3, aged between 55 and 80 years, presence of disicnesie not too debilitating with score at Involuntary Abnormal movement Scale (AIMS) at 0 and 3 months.
The Unified Parkinson's Disease Rating Scale (UPDRS) part 3, part 4 and the HY were used to evaluate the motor severity of Parkinson's disease.
PD patients was recruited within the county of ULSS 4 High Vicentino, Italy, over a 3months period between December 2015 and March 2016.
The UPDRS motor score was checked at the best "on" period to assess the clinical severity of PD.
SPSS 21.0 software was used for data analysis. A paired *t*-test was used to compare the AIMS score at onset and after one and two months. A *P* value < 0.05 was considered statistically significant.

Table 1. AIMS SCALE IN TIME



Results

Study participants included 5 subjects diagnosed with PD, 3 were men and 2 women; mean age was 61.2±6.30 years, mean education was 8.4±2.8 years.
The mean of disease onset was 12.2±1.3 years and mean of motor impairment at UPDRS-III, IV and HY was 28.2±4.43, 6.0±1.06.0±1.0 and 2.6±1.5 respectively.
The mean of AIMS score at the first outpatient assessment was 20.8±3.19, while at 1 month and at three months was 14.8±2.5 and 13.6±2.96 respectively.
There was a significant association between AIMS scale at onset and AIMS scale after one month (p=0.02)and AIMS scale after three months (p=0.02).

Conclusion

The study results suggest, albeit in very preliminary and on a limited sample of patients, that the Discinex® combination therapy associated with antiparkinsonian best therapy possible, could improve dyskinetic symptoms early with an effect that tends to preserve itself in time. Further studies and further case studies are needed to confirm these results.

References

1. Ross GW, Abbott RD, Petrovitch H, Morens DM, Grandinetti A, Tung KH, Tanner CM, Masaki KH, Blanchette PL, Curb JD, Popper JS, White LR. Association of coffee and caffeine intake with the risk of Parkinson disease. JAMA 2000 May 24-31;283(20):2674-9.
2. Ascherio A, Zhang SM, Hernán MA, Kawachi I, Colditz GA, Speizer FE, Willett WC. Prospective study of caffeine consumption and risk of Parkinson's disease in men and women. Ann Neurol 2001 Jul;50(1):56-63.
3. Ascherio A, Weisskopf MG, O'Reilly EJ, McCullough ML, Calle EE, Rodriguez C, Thun MJ Coffee consumption, gender, and Parkinson's disease mortality in the cancer prevention study II cohort: the modifying effects of estrogen. Am J Epidemiol 2004 Nov 15;160(10):977-84.