

Subcutaneous foslevodopa/foscarbidopa for advanced Parkinson's disease: the experience of the Verona Parkinson Centre

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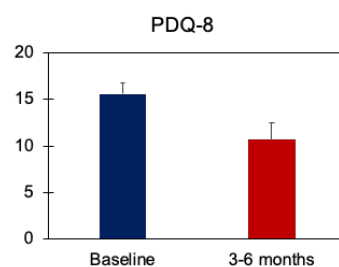
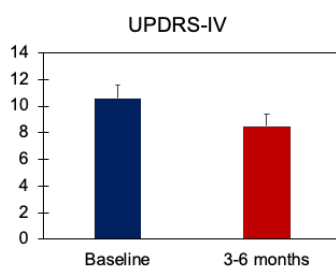
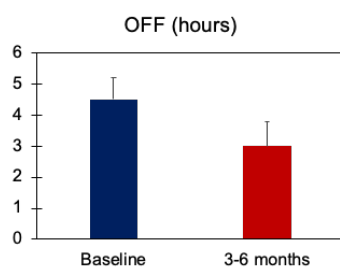
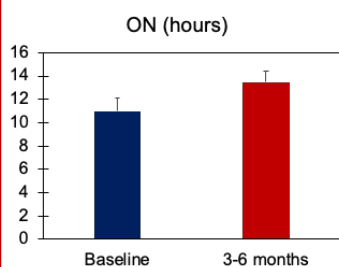
INTRODUCTION

Subcutaneous foslevodopa/foscarbidopa has recently been introduced as an innovative treatment for motor fluctuations and troublesome dyskinesia in PD patients. Real-life evidence on the efficacy and safety of subcutaneous foslevodopa/foscarbidopa is lacking.

OBJECTIVE

To report the experience of the first 20 PD patients treated with subcutaneous foslevodopa/foscarbidopa at the Parkinson Centre at the University of Verona and the efficacy and safety of this new treatment according to a real-world experience.

Demographics			PD features					
Age	Sex	Education	Age at onset	Disease duration	Symptoms at onset	LEDD (mg)	HY	UPDRS-III ON
66	F	12	45	21	Bradykinesia, left arm	910	5	58
81	F	5	56	25	Tremor, left arm	1255	5	52
75	F	5	59	16	Bradykinesia and rigidity, left limbs	1005	4	45
72	M	5	60	12	Tremor, left arm (essential tremor since young age)	1300	2	40
76	M	8	53	23	Bradykinesia (essential tremor since young age)	750	2	38
61	F	17	47	14	Tremor, right arm	1130	3	45
71	F	5	52	19	Bradykinesia	1460	4	49
62	M	17	51	11	Bradykinesia	1890	2	43
61	F	8	40	21	Tremor	1250	2	39
83	F	13	51	32	Tremor, right leg	1025	4	51
70	F	8	61	9	Bradykinesia and tremor, left arm	2065	3	54
70	M	13	52	18	Motor impairment, right arm	560	2	43
77	F	7	67	10	Tremor, left arm	440	2	39
66	F	18	51	15	Tremor, left > right arm	1305	2	34
59	M	8	35	24	Tremor, left > right arm	1197	2	22
64	M	8	46	18	Tremor, right arm	1500	2	36
75	M	10	63	12	Tremor, left arm	1933	3	39
79	M	13	62	17	Tremor, right leg	900	2	24
73	M	8	59	14	Tremor, left arm	1500	4	50
58	F	13	49	9	Tremor, right arm	1007	2	27



RESULTS

Twenty patients were enrolled (Table). Three were previously treated with subcutaneous apomorphine infusion, three with continuous intrajejunal levodopa/carbidopa intestinal gel infusion, and one with deep brain stimulation that was removed because of infection. On time without troublesome dyskinesia and off time were significantly improved at 3 months (+2.2 h, SD 0.7 and -1.8, SD 0.6; $p < 0.05$) and 6 months (+2.4 h, SD 0.6 and -1.5, SD 0.4; $p < 0.05$). Quality of life (PDQ-8) significantly improved ($p < 0.05$). For non-motor symptoms and non-motor fluctuations see the poster by Mantovani et al. No serious adverse events were reported. Seven patients reported infusion site adverse events (erythema, pain) that required education of caregivers and lead to discontinuation in one patient. Two patients dropped out for mild psychosis and incomplete control of motor fluctuations, respectively. Titration of the drug required 3-4 weeks in most patients up to 2 months in some of them.

CONCLUSIONS

Our data confirm that foslevodopa/foscarbidopa improves motor fluctuations and quality of life in patients with advanced PD with no severe side effects. Further and longer follow up data are needed to confirm these preliminary results, as well as the long-term safety of this innovative treatment.