Intensive Rehabilitation Program for patients with Functional Motor Disorders: a 3-years' experience.

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Background:

Functional Movement Disorders (FMD) are common, affect mainly patients of working age, can cause significant disability and have been reported to have a poor prognosis [1].

There is increasing evidence that specialised physiotherapy along with other approaches such as psychotherapy can be of benefit in a proportion of patients [2,3].

Objective:

To describe the clinical characteristics and outcomes of a cohort of patients with FMD who attended the FMD clinic at our centre and completed an intensive rehabilitation program.

Methods:

Prospective cohort study of consecutive patients with FMD seen in our Unit and referred for a 5 consecutive days physiotherapy programme between January 2017 and January 2020. The treatment was based on education, movement retraining and self-management strategies following the current consensus recommendations[4]. Clinical and demographic characteristics were recorded. Patients received one hour session twice a day. Outcomes were measured by using the Clinical Global Impression Scale-Improvement (CGI-I), which was completed by patients and the Modified Ranking Scale at the end of treatment, 3-month and 6-month follow-up. Results are reported in percentages and mean ± SD. Friedman test was used for comparations. Significance was set at p<0,001.

Results:

- A total of 39 patients were included: 53,8% female, mean age 43,7 (± 13,4) years.
- Mean disease duration was 36 (± 24,7) months . Main clinical characteristics are shown in Table 1.
- Twenty-seven (69,2%) patients were not working due to health reasons and 23 (59%) required some help for Activities of Daily Life.

Table 1: Clinical Characteristics (n=39)

Type of FMD	Gait impairment	**19 (48,7 %)**
	Tremor	11 (28,2 %)
	Dystonia	5 (12,8 %)
	Limb weakness	3 (7,7 %)
	Functional jerks	1 (2,6 %)
Precipitating factor	Physical	**25 (64,2 %)**
	Emotional	7 (17,9 %)
	Not identified	7 (17,9 %)
Associated Pain		33 (84,6 %)
Associated Fatigue		31 (79,5 %)
HADS (mean ± SE) *Scores <11 normal		Anxiety (8,17±5,1) Depression(7,97±3,9)

- Thirty one (79,5%) patients rated themselves as "very much improved" or "much improved" at the end of treatment, which was maintained in 26 (66,7%) patients at 6-month follow-up (p<0,001 Friedman test) (Figure1).
- Functional independence for activities of daily life improved in 48,7% at 6-month follow-up (p<0,001 Friedman test) (Table 2).
- Twenty-six (78,7%) patients required a device for gait assistance before treatment and this was reduced to 30,3% at 6-month follow-up (p<0,001 Friedman test) (Figure 2).

Figure 1: CGI SCALE RESULTS

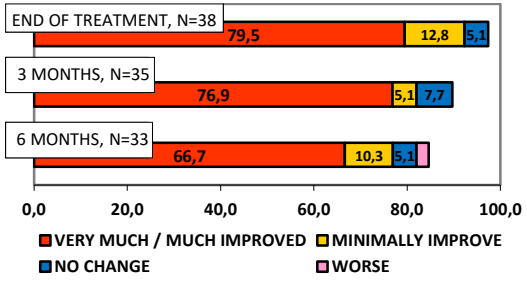
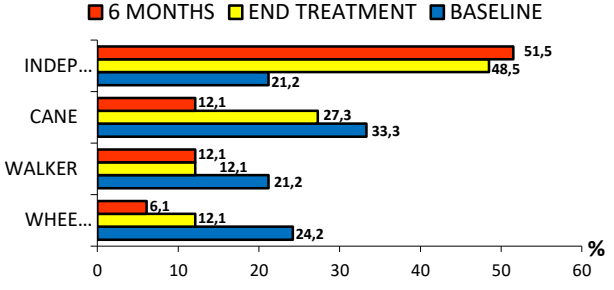


Table 2: MODIFIED RANKING SCALE RESULTS

	Baseline (n = 39)	3 months Follow-up (n = 35)	6 months Follow-up (n = 33)
Severe disability	**20,5 %**	8,6 %	**9,1 %**
Moderate disability	38,5 %	22,8 %	24,2 %
Slight disability	41 %	68,6 %	66,7 %

Figure 2: GAIT-ASSISTIVE DEVICES



Conclusions:

- Specialised physiotherapy can be of benefit in a large proportion of patients with FMD and this benefit is maintained at medium term.
- Our results are in line with recent published studies, supporting the growing evidence that suggest physiotherapy as a promising treatment for FMD.
- However, randomised trials with larger samples are still needed to confirm this.

References: [1] Ahmad O, Ahmad KE. Functional neurological disorders in outpatient practice: an Australian cohort. J Clin Neurosci 2016; 28:93–6. [2] Hallett M, Stone J, Carson A. Handbook of Clinical Neurology. 2016. Vol. 139:555-569. [3] Nielsen G, Buszewic M et al. Randomised feasibility study of physiotherapy for patients with functional motor symptoms. J Neurol Neurosurg Psychiatry 2017; 88:484-490. [4] Nielsen G, Stone J et al. Physiotherapy for functional motor disorders: a consensus recommendation. J Neurol Neurosurg Psychiatry 2015; 86:1113–1119.