

A NEW NABIXIMOLS POSSIBLE TARGET: FATIGUE IN MS?

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Introduction

Spasticity is one of the most frequent and disabling symptoms in patients with Multiple Sclerosis (MS). The most serious disorder associated with spasticity is fatigue, it has a negative effect on quality of life. A new drug, marketed in 2013 in Italy, made from Cannabis Sativa, has raised in recent years great interest among the scientific community, with an indication for the treatment of spasticity in MS. Several studies demonstrate the effectiveness of this drug in the treatment of severe spasticity and to pain sensation, but not have been identified to date, however, the direct correlation studies of this drug with fatigue in MS patients. This work aims to investigate the clinical effectiveness of pharmacological treatment with Cannabis Sativa in spray formulation on fatigue, which is frequently associated with spasticity and quality of life.

Materials and methods

The sample consists of 5 patients diagnosed with MS, treated at the Center for Multiple Sclerosis Hospital of Fidenza (PR), with Cannabis Sativa in spray formulation.

We decided to consider a small group of responders. They were administered before and after the above drug therapy, two self-assessment scales: the Modified Fatigue Impact Scale (MFIS) and the Multiple Sclerosis Quality of Life-54 (MSQoL-54).

The evaluation was performed by comparing the MFIS and MSQoL-54 scale before treatment (T1) and after treatment (T2) and considering, for each patient, the data request by AIFA like number of puffs, NRS score (self-assessment scale), cycles of treatment.

Results

The analysis of the data resulting from the MFIS scale, between the time T1 and T2, showed a statistically significant decrease in fatigue after treatment with Cannabis Sativa spray ($p < .05$) [Tab.1]; however the difference observed between the total scores of MSQoL-54 scale at time T1 and T2 was not significant, but the subscale of the Health Physics MSQoL-54 detects a higher score in T2 and appears to be statistically significant ($p < .055$). [Tab.2]

Paired Samples T-Test								
			Test	statistic	df	p	Mean Difference	SE Difference
Mfis T1	-	Mfis T2	Student's	2.332	4	0.080	5.400	2.315
			Wilcoxon	15.000		0.058	6.000	2.315

[Tab. 1]

Paired Sample T-Test							
	t	df	p	Mean Difference	SE Difference	Lower	Upper
MSQoL Healt Physics T1 – MSQoL Healt Physics T2	-2.689	4	0.055	-10.246	3.810	-20.83	0.333

[Tab. 2]

Discussion and conclusion

This study has shown that the fatigue that most MS patients reported as greater disorder can be reduced with this drug, although it is in the market for the treatment of spasticity. The sample taken into account is limited. but representative. This is a pilot study, waiting to enlarge the sample of patients.

This study showed that reducing the sense of fatigue, it may be assumed to improve the quality of life of the patient, stimulating compliance to drug treatment, rehabilitation and fisoterapic treatment allowing the achievement of performance and satisfactory results.

Bibliography

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