

Efectividad y seguridad del cannabidiol (100 mg dos veces al día) para el dolor neuropático central en esclerosis múltiple y trastorno del espectro de neuromielitis óptica: hallazgos preliminares de un estudio piloto multicéntrico.

La European Charcot Foundation es una organización independiente y sin fines de lucro dedicada al avance de la investigación en EM y su congreso anual es el más prestigioso en cuanto a sus contenidos científicos reuniendo a expertos, investigadores y clínicos líderes para discutir las innovaciones más prometedoras que están moldeando el futuro del manejo de la EM, TENMO y MOGAD.

Estos hallazgos preliminares sobre el cannabidiol (CBD) validan su consideración como una terapia emergente de interés para abordar un síntoma debilitante, a menudo refractario, en poblaciones complejas y con necesidades terapéuticas insatisfechas.



Alef Medical Argentina



Alef Medical Argentina



Escaneá el código QR
para descargar el
poster

- Estudio prospectivo multicéntrico (EMCA) sobre (CONVUPIDIOL) en el **DNC moderado a severo** asociado a EM y TENMO, una condición frecuentemente resistente a las terapias analgésicas convencionales.
- Solución oral de CONVUPIDIOL en dosis de **100 mg dos veces al día** (dosis total de 200 mg/día) durante 12 semanas, siendo la única intervención farmacológica evaluada específicamente para DNC durante el periodo.
- El análisis preliminar en los primeros 8 pacientes (n=8) mostró una **tendencia a la reducción de las puntuaciones NRS** (máxima, mínima, promedio y actual) de dolor de la línea de base a la semana 12 en la mayoría de los sujetos.
- **Mejoras consistentes** en **calidad de vida** (evaluadas mediante MSQOL-54), específicamente en el ítem: interferencia del dolor con la actividad general, el estado de ánimo y la capacidad de caminar.
- **Se observó una reducción significativa** en la necesidad de medicación analgésica de rescate.
- El tratamiento con CBD fue **generalmente bien tolerado**. No se reportaron eventos adversos graves (SAEs).
- Los resultados deben interpretarse con cautela debido al **diseño abierto no controlado** y el pequeño tamaño muestral preliminar (n=8).
- Estos hallazgos preliminares sugieren que la terapia con CBD 200 mg/día podría estar asociada con **mejoras en la intensidad del DNC y su impacto funcional** en pacientes con EM y TENMO, lo que justifica la validación con el **análisis de la cohorte completa** en curso.

Effectiveness and Safety of Cannabidiol (100 mg Twice Daily) for Central Neuropathic Pain in Multiple Sclerosis and Neuromyelitis Optica Spectrum Disorder: Preliminary Findings from a Multicentre Pilot Study

Dra María Eugenia Balbuena Aguirre¹; Dr Ricardo Alonso¹; Dr Fernando Avieux¹; Dra Paula Carrizo¹; Dra Cecilia Gonzalez²; Dra Luciana Lazaro¹; Dra Mariana Nadelman¹; Javier J. Toibaro¹; Dr. Diego Sarasola¹.
¹EMCA Study Group. Buenos Aires, Argentina.

BACKGROUND

Central neuropathic pain (CNP) is a prevalent and frequently debilitating symptom in individuals with multiple sclerosis (MS) and neuromyelitis optica spectrum disorder (NMOSD), often resistant to conventional analgesic therapies. Cannabidiol (CBD), a non-psychoactive phytocannabinoid, has shown potential therapeutic effects, including analgesia. Robust clinical evidence supporting its specific use for CNP in MS and NMOSD, especially with standardised oral formulations and dosages, was limited when the study began. This represents the first available information for this CBD formulation in this population, which is a strength of the study.

OBJECTIVES

To prospectively assess the preliminary effectiveness and safety of oral cannabidiol solution (100 mg twice daily) over 12 weeks in patients with MS or NMOSD experiencing moderate to severe CNP, following the clinical decision to initiate CBD in a real-world practice setting. Primary outcomes included changes in pain intensity (Numeric Rating Scale, NRS) and health-related quality of life (Multiple Sclerosis Quality of Life-54, MSQOL-54).

METHODS

The EMCA study is an ongoing, multicentre, prospective investigation. Eligible participants were adults (18–70 years) with a confirmed diagnosis of MS or NMOSD for at least one year, suffering from moderate to severe CNP (as per NRS scores) despite stable baseline analgesic regimens for > 6 months. During the 12 weeks of evaluation, CBD (100 mg twice daily) was the only pharmacological intervention specifically assessed for central neuropathic pain. Pain intensity (NRS: maximum, minimum, average over the past week, and current pain) and MSQOL-54 were assessed at baseline and week 12. This is an interim analysis. Of 16 patients enrolled to date, this summary presents preliminary findings from the first 8 patients who completed the 12-week follow-up. The remaining 8 patients are still active and in follow-up in the study.

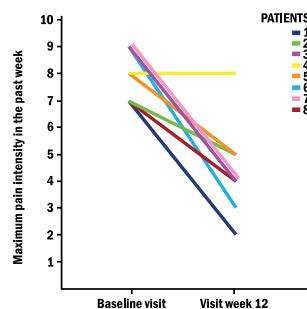
PRELIMINARY RESULTS

The initial cohort of 16 enrolled patients was predominantly female (81.3%, 13/16). Baseline characteristics of the 8 patients who completed 12-week follow-up include a median EDSS of 2 (IQR 0-3.2), a median disease duration of 5.5 years (IQR 2-11.5), a median number of relapses of 1.5 (IQR 1-2.75), and 75% (6/8) of patients receiving biologic treatment. The phenotype distribution was as follows: Relapsing-Remitting MS (RRMS) 50% (4/8), Secondary Progressive MS (SPMS) 12.5% (1/8), NMOSD AQP4+ 25% (2/8), and NMOSD AQP4- 12.5% (1/8).

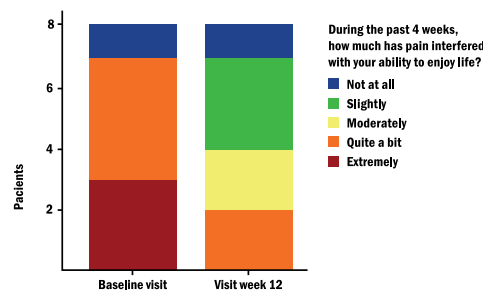
Preliminary analysis indicated a trend towards reduced NRS pain scores (maximum, minimum, average, and current) from baseline to week 12 in most patients, as seen in the individual bar charts. Improvements were also observed in pain interference with general activity, mood, walking ability, and enjoyment of life at week 12 compared to baseline (MSQOL-54 data). There was a reduction in the need for rescue analgesia between baseline (50% [8/16] of the enrolled cohort required rescue) and week 12 (25% [2/8] of the evaluated patients required rescue at that time point).

CBD treatment was generally well tolerated. Mild headache, possibly related to CBD, was reported at week 4 and resolved spontaneously. No serious adverse events were reported during this preliminary phase in this 8-patient cohort.

Assessment of maximum pain during the last week at the baseline visit and after receiving CBD 200 mg per day for 12 weeks. At week 12, n=8



Assessment by MSQOL 54 at the baseline visit and after administration of CBD 200 mg per day for 12 weeks. At week 12, n=8



REFERENCES

1. Thompson AJ, Baraitser SE, Geurts J, Hemmer B, Ciccarelli O. Multiple sclerosis. *Lancet* 2018;391(10200):1692-99.
2. Newcombe SD, Alotaibi P, Balashov J, Bennett SE, Cutter G, Fontana K, et al. A framework of care in multiple sclerosis: part 2: symptomatic care and beyond. *International Journal of MS Care* 2017;15(1):42-56.
3. Giovannelli G, Giamberini TS, D'Amico K, Hansen HJ, Koch-Henriksen N, Bach FW. Pain in patients with multiple sclerosis: a population-based study. *Arch Neurol* 2003;60:2088-94.
4. Zito AB, Bonelli F, Casasco S, Di Marco V, Mucchetti R. Neuropharmacological cannabinoid: new therapeutic opportunities from an ancient herb. *Trends in Pharmacological Sciences* 2009;30(10):523-7.
5. Kishimoto H, Saitoh T, Inoue S, Inoue M, Kameyama M, Wada K. Does the cannabidiol derivative reduce central pain in multiple sclerosis? Randomized double-blind placebo-controlled crossover trial. *BMC Med* 2011;9:100.
6. Zajack J, Fox P, Soudain H, Wright D, Wikary J, Nuss A, et al. Cannabinoids for treatment of spasticity and other symptoms related to multiple sclerosis (CANIS study): multicentre randomised placebo-controlled trial. *Lancet* 2013;382:1517-26.
7. Kishimoto H, Saitoh T, Inoue S, Inoue M, Kameyama M, Wada K. A preliminary controlled study to determine whether whole-plant cannabis extracts can improve intractable neurogenic symptoms. *Clin Rehabil* 2003;17:27-4.
8. Kishimoto H, Saitoh T, Inoue S, Inoue M, Kameyama M, Wada K. Analgesic effect of the synthetic cannabinoid CB2 on chronic neuropathic pain: a randomized controlled trial. *JAMA* 2003;290:1751-60.
9. Ffrench P, Minuzzi S, Bonelli F, Giamberini T, Deon V. Cannabis and cannabinoids for symptomatic treatment of people with multiple sclerosis. *Cochrane Database of Systematic Reviews* 2022, Issue 5, Art. No. CD013444. DOI: 10.1002/14691988.CD013444.pdf2

CONCLUSION

These preliminary findings suggest that cannabidiol therapy at 100 mg twice daily may be associated with improvements in CNP intensity and its impact on daily function and quality of life in patients with MS and NMOSD in a clinical practice setting. The observed safety profile in this small initial cohort appears favourable. These results should be interpreted with caution due to the effectiveness study design (open-label, non-controlled), the small sample size, and the preliminary nature of the data. It is important to note that as an interim analysis of the first 8 'completers', a potential selection bias exists, as these patients who completed follow-up first may not be representative of the total cohort of 16 patients once all have completed the study. Completion of the ongoing EMCA study and full cohort analysis will be essential to validate these initial observations.



Alef Medical Argentina