



REVISTA MÉDICA DEL
HOSPITAL GENERAL
DE MÉXICO

www.elsevier.es/hgmx



REVIEW ARTICLE

The use of cannabis as an antiepileptic treatment in Mexico: A review, bioethical analysis, discussion and position of the Hospital General de México Epilepsy Clinic



M. Kalkach-Aparicio^{a,b}, M. Cuéllar-Herrera^b, E.L. Flores-Ramírez^b, P. Ruíz-Gadea^{b,c},
L. Medina-Osti^b, D. Trejo-Martínez^b, F. Velasco^b, G. Aguado^b,
A.L. Velasco^{b,*}, G. Gorian-Montealegre^{b,1}

^a Bioethics Faculty, Universidad Anáhuac México Norte, Mexico

^b Epilepsy Clinic, Functional Neurosurgery Unit, Stereotaxis and Radiosurgery, Hospital General de México, Mexico City, Mexico

^c Combined Studies in Medicine Plan, Universidad Nacional Autónoma de México, Mexico City, Mexico

Received 25 January 2016 ; received in revised form 28 April 2016; accepted 29 April 2016

Available online 19 May 2016

KEYWORDS

Medicinal cannabis;
Refractory epilepsy;
Marijuana review;
Cannabinoids;
CBD;
CBDV;
Clinical neuroethics;
Clinical bioethics;
Hospital General de
México

Abstract In Mexico and the United States of America (USA), a debate was recently opened on the use of some cannabis extracts as anticonvulsive drugs. Given the broad influence that social networks and the media have on the general population, it is worth highlighting the risk to the public of receiving erroneous information and forming opinions that may compromise their health.

In light of this context, taxonomic and biochemical properties, the endocannabinoid system and the historical and legal context of cannabis were reviewed in order to provide a clear overview on the physiological and cultural impacts of cannabis extracts. Subsequently, pre-clinical models, clinical trials and ongoing studies evaluating some phytocannabinoids and synthetic cannabinoids as antiepileptic treatment were assessed.

The obtained information was then subjected to interdisciplinary scrutiny and discussion. Taking into account that plantation and commercialisation of cannabis have been historically illegal in Mexico, the relative lack of evidence regarding its effects in humans and the ideas arising from the aforementioned, it is understandable that the medical community, as well as the general population, have reservations about its suitability as a treatment.

Having developed a clinical neuroethics methodology, an interdisciplinary expert group discussion was coordinated in order to assess the benefits of the medical practice and limit the

* Corresponding author at: Head of Epilepsy Clinic, Functional Neurosurgery Unit, Stereotaxis and Radiosurgery, Hospital General de México, Balmis 148, 06726 Mexico City, Mexico.

E-mail address: analuisav@yahoo.com (A.L. Velasco).

¹ Collaborator.

PALABRAS CLAVE

Cannabis medicinal;
Epilepsia refractaria;
Revisión marihuana;
Cannabinoides;
CBD;
CBDV;
Neuroética clínica;
Bioética clínica;
Hospital General de México

influence that healthcare professionals' ethics could have on decision-making. This concluded with three proposals that portray the Hospital General de México Epilepsy Clinic's position, while also contributing important considerations to the mature debate concerning the legalisation of cannabis.

© 2016 Sociedad Médica del Hospital General de México. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

El uso del cannabis como tratamiento antiepiléptico en México: una revisión, análisis bioético, discusión y postura de la Clínica de Epilepsia del Hospital General de México

Resumen En México y en los Estados Unidos de América (E.U.A.), recientemente se encendió el debate en torno al uso de algunos extractos del cannabis, como antiepilépticos. No obstante debido a la gran influencia que las redes sociales y medios de comunicación representan para la población general, vale la pena destacar el riesgo en el que se encuentran las personas, al recibir información equivocada y formar opiniones que comprometen la salud de ellos o de sus familiares.

A partir de este contexto, se realizó una revisión sobre los aspectos taxonómicos y bioquímicos, del sistema endocannabinoide y del contexto histórico-legal del cannabis, con la finalidad de tener un panorama claro de las implicaciones fisiológicas y culturales del uso de los extractos de la planta. Posteriormente se revisaron los modelos pre-clínicos, ensayos clínicos y estudios actualmente en desarrollo que evalúan algunos fitocannabinoides y cannabinoides sintéticos como tratamiento antiepiléptico.

La información fue después sometida a escrutinio y discusión interdisciplinaria. Tomando en cuenta la ilegalidad del cultivo y comercialización de la planta en México, la relativamente escasa evidencia respecto a sus efectos en seres humanos, así como las ideas que de estos hechos se desprenden, se comprende que tanto la comunidad médica, como la población general tengan prejuicios respecto a su pertinencia como tratamiento.

A partir del desarrollo de una metodología de neuroética clínica se coordinó el diálogo interdisciplinario entre un grupo de expertos, con la finalidad de encontrar el bien en el acto médico, disminuyendo así el efecto que la moral del personal de salud pudiera tener en la toma de decisiones. Esto derivó a la elaboración de tres propuestas que representan la postura de la Clínica de Epilepsia del Hospital General de México, y también brindan consideraciones importantes en el camino al debate bien pensado sobre la legislación del uso del cannabis.

© 2016 Sociedad Médica del Hospital General de México. Publicado por Masson Doyma México S.A. Este es un artículo Open Access bajo la CC BY-NC-ND licencia (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

It has been said that "...for farmers it is a source of fibre cultivation; for doctors it remains an enigma; for consumers it generates euphoria; for the police it is a threat; for traffickers it is a lucrative hazard; for convicts and their families it is a chagrin".¹

For thousands of years the cannabis plant has been regarded as a source of fibre, used recreationally due to its psychoactive properties, and has also constituted a therapeutic option for some illnesses. Recently, an important discussion has arisen in Mexico and throughout the world regarding its medicinal application, as the plant is illegal in many countries. However, some believe that this debate is not principally scientific, but rather due to historical, cultural, moral and political implications.²

Specifically, debate has recently been sparked in Mexico and the United States of America (USA) regarding the medicinal use of cannabis as an antiepileptic. The Hospital

General de México Epilepsy Clinic is a national and world-wide centre of reference in epilepsy due to its considerable experience in alternative therapies for epilepsy syndromes. It was therefore decided to conduct a review on this subject, followed by an analysis and discussion to provide this Clinic's position and proposals to the medical-scientific community on the use of cannabis derivatives as an anticonvulsant.

This paper will focus on this subject, addressing scientific, historical, legal, medical and bioethical aspects to provide logical conclusions regarding its current use in Mexico.

Taxonomy and biochemical composition of cannabis

The debate surrounding cannabis does not only centre on aspects related to use; its taxonomy and classification have also been subject to scientific discussion. There are

Download English Version:

<https://daneshyari.com/en/article/3830875>

Download Persian Version:

<https://daneshyari.com/article/3830875>

[Daneshyari.com](https://daneshyari.com)