

Título: ESPECTROSCOPIA DE RESONANCIA MAGNETICA APLICADA AL DIAGNOSTICO CLINICO EN PERSONAS CON TRASTORNOS DEL ESPECTRO DE AUTISMO

Nombre: JIMENEZ DE ESPINOZA, CARMEN DOLORES

Universidad: Universidad de La Laguna

Departamento: Anatomía, anatomía patológica, histología y fisiología

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Dirección:

> **Director:** JOSÉ LUIS GONZÁLEZ MORA

> **Codirector:** Francisco José Marcano Serrano

Tribunal:

> **presidente:** Rafael Castro Fuentes

> **secretario:** ROBERTO GARCÍA ÁLVAREZ

> **vocal:** Nelly Fabiola Padilla Gomes

Descriptores:

> ESPECTROSCOPIA DE RESONANCIA MAGNETICA

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Localización: ESPECTROSCOPIA DE RESONANCIA MAGNETICA APLICADA AL DIAGNOSTICO CLINICO EN PERSONAS CON TRASTORNOS DEL ESPECTRO DE AUTISMO

Resumen: All definitions of autism relate to an implicit or explicit form the triad of social, communicative and imaginative or behavioral constraint described by (Wing & Gould, 1979). However evidence now that autism shows great phenotypic variation due to genetic and environmental factors that give the identity of multifactorial disease arises. Even so the latest revision of the Diagnostic and Statistical Manual of Mental Disorders DSM-V (Association, 2013) has proposed to change the name of Pervasive Developmental Disorder by Disorder Autism Spectrum as a single category, which would further increase the number of cases considered with this disorder. In recent years there has been a considerable increase in cases detected and diagnosed, from 5 years of age, within the Autism Spectrum Disorders (ASD). Although, it is possible that this increase to greater accuracy of procedures and instruments diagnostics, or simply to improve the knowledge and training of professionals, or even, a real increase in the incidence of this disorder is due within the global population, so the development of new diagnostic methods to quantify and study the evolution of the spectrum of autism, more reliably disorder, could help us better understand the neurometabolic processes involved, considering that all the mechanisms and pathways that accompany synapses in central nervous system (CNS) occurs in a very short time scale, milliseconds.

The Spectroscopy Proton Magnetic Resonance (1H-MRS) is a technique recently available in radiological

practice that provides a biochemical, metabolic and functional assessment of tissues and complemented in a suitable manner studies conventional imaging, so its use implemented every day in the clinic and especially by neuroradiologists. It has been used in the evaluation of brain tumors and now has spread to the valuation of other diseases such as metabolic disorders, studies of dementia, vascular disorders, and assessment of some psychiatric disorders and more recently in the assessment of heart disease, liver, breast and prostate. This study is oriented towards the application of spectroscopy proton magnetic resonance to improve the diagnosis of autism spectrum disorder with the prospect of future implement this technique as the most effective diagnostic method in ASD.