Accepted Manuscript

Title: Association between environmental exposure to

pesticides and epilepsy

Authors: Mar Requena, Tesifón Parrón, Angela Navarro, Jessica García, María Isabel Ventura, Antonio F. Hernández,

Raquel Alarcón

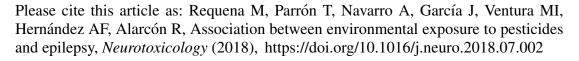
PII: S0161-813X(18)30247-X

DOI: https://doi.org/10.1016/j.neuro.2018.07.002

Reference: NEUTOX 2359

To appear in: *NEUTOX*

Received date: 16-1-2018 Revised date: 22-6-2018 Accepted date: 2-7-2018



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Association between environmental exposure to pesticides and epilepsy

Mar Requena^{a*} mrm047@ual.es, Tesifón Parrón^{a,b}, Angela Navarro^d, Jessica García^c, María Isabel Ventura^d, Antonio F. Hernández^{e+}, Raquel Alarcón^{a+}

*Corresponding author at: MARIA DEL MAR REQUENA MULLOR C/MONTESQUIEU, 8. 04230 HUERCAL DE ALMERÍA, ALMERIA (SPAIN) Telephone number: (+34) 660767288

Highlights

- The relationship between environmental exposure to pesticides and epilepsy is unknown
- 4007 subjects diagnosed with epilepsy over the years 1998 and 2010 were examined
- Areas of high vs. low pesticide used were defined based on agronomic data
- A high prevalence rate of epilepsy was found in areas of greater pesticide use
- Environmental exposure to pesticides might increase the risk of having epilepsy

Abstract

There is increasing evidence of an association between long-term environmental exposure to pesticides and neurodegenerative disorders; however, the relationship with epilepsy has not been addressed thus far. This study was aimed at determining the prevalence and risk of developing epilepsy among people from South-East Spain living in areas of high vs. low exposure to pesticides based on agronomic data. The study population consisted of 4007 subjects with a diagnosis of epilepsy and 580,077 control

^aUniversity of Almería School of Health Sciences, Almería, Spain.

^bAndalusian Council of Health at Almería Province, Almería, Spain.

^c Rafael Mendez Hospital, Lorca, Murcia, Spain.

^d Torrecárdenas Hospital, Almería, Spain.

^e Dept. Legal Medicine and Toxicology, University of Granada School of Medicine, Granada, Spain

[†]Equally contributing authors

Download English Version:

https://daneshyari.com/en/article/8550035

Download Persian Version:

https://daneshyari.com/article/8550035

<u>Daneshyari.com</u>