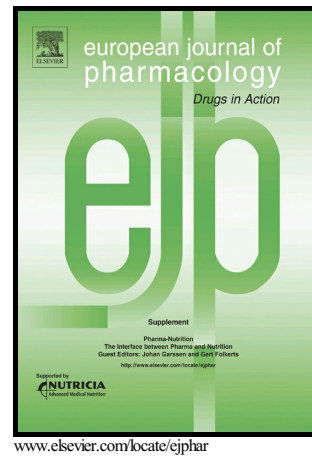


# Author's Accepted Manuscript

Role of inflammation in epilepsy and neurobehavioral comorbidities: Implication for therapy

Yam Nath Paudel, Mohd. Farooq Shaikh, Sadia Shah, Yatinesh Kumari, Iekhsan Othman



PII: S0014-2999(18)30472-2  
DOI: <https://doi.org/10.1016/j.ejphar.2018.08.020>  
Reference: EJP71945

To appear in: *European Journal of Pharmacology*

Received date: 25 May 2018  
Revised date: 15 August 2018  
Accepted date: 16 August 2018

Cite this article as: Yam Nath Paudel, Mohd. Farooq Shaikh, Sadia Shah, Yatinesh Kumari and Iekhsan Othman, Role of inflammation in epilepsy and neurobehavioral comorbidities: Implication for therapy, *European Journal of Pharmacology*, <https://doi.org/10.1016/j.ejphar.2018.08.020>

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 galley proof before it is published in its final citable 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.

## **Role of inflammation in epilepsy and neurobehavioral comorbidities: Implication for therapy**

Yam Nath Paudel<sup>1</sup>, Mohd. Farooq Shaikh<sup>1\*</sup>, Sadia Shah<sup>2</sup>, Yatinesh Kumari<sup>1</sup>, and Iekhsan Othman<sup>1</sup>

<sup>1</sup>Neuropharmacology Research Laboratory, Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Bandar Sunway, Selangor, Malaysia

<sup>2</sup>Department of Pharmacology, All India Institute of Medical Sciences, New Delhi, India

**\*Corresponding Author Mohd. Farooq Shaikh, PhD** Neuropharmacology Research Laboratory, Jeffrey Cheah School of Medicine and Health Sciences, MONASH University Malaysia, Jalan Lagoon Selatan, Bandar Sunway, Selangor, Malaysia., Contact No: +603 5514 4483, Email: farooq.shaikh@monash.edu

### **Abstract:**

Epilepsy is a devastating condition affecting around 70 million people worldwide. Moreover, the quality of life of people with epilepsy (PWE) is worsened by a series of comorbidities. The neurobehavioral comorbidities discussed herein share a reciprocal and complex relationship with epilepsy, which ultimately complicates the treatment process in PWE. Understanding the mechanistic pathway by which these comorbidities are associated with epilepsy might be instrumental in developing therapeutic interventions. Inflammatory cytokine signaling in the brain regulates important brain functions including neurotransmitter metabolism, neuroendocrine function, synaptic plasticity, dopaminergic transmission, the kynurenine pathway, and affects neurogenesis as well as the neural circuitry of moods. In this review, we hypothesize that the

Download English Version:

<https://daneshyari.com/en/article/10143278>

Download Persian Version:

<https://daneshyari.com/article/10143278>

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