



# INTRAUTERINE EXPOSURE TO PREGABALIN AND GLOBAL DEVELOPMENTAL DELAY IN INFANTS: A CASE REPORT

JAHAN KHAN<sup>1</sup>, AISHLING COLLINS, EMMA FLETCHER<sup>2</sup>, FIONA FENTON<sup>3</sup>

1. ST PATRICK'S UNIVERSITY HOSPITAL DUBLIN  
 2. ST JOHN OF GOD HOSPITAL DUBLIN  
 3. NATIONAL DRUG TREATMENT CENTRE DUBLIN

## Abstract:

Pregabalin is licensed for the treatment of epilepsy and anxiety disorders. In addition, it is increasingly recognized as a drug of abuse. Teratogenic effects have been demonstrated in animal models, however, there is a dearth of research relating to potential teratogenic effects in humans. This case highlights the potential role of intrauterine exposure to Pregabalin in contributing to Global Developmental Delay (GDD) in two children.

## Introduction:

Being a GABA analog, in the central nervous system it reduces the release of excitatory neurotransmitters, which are probably associated with analgesic and anticonvulsant effect. However, over the last few years there has been increased abuse of Pregabalin. The frequent desirable effects reported include euphoria, relaxation and sleep aid. Our case is about pregabalin abuse in pregnancy.

## Case presentation:

A 29-year female was referred by GP for inpatient detoxification of Pregabalin. She was 16 weeks pregnant at the time of her admission. She was taking 1400 mg of it daily. Overall she reported 10 years of dependence on it. She reported using Pregabalin in her last two pregnancies and GDD was diagnosed in both children.

Child A, who is three and a half years old now, was born at full-term by normal vaginal delivery following an uncomplicated pregnancy. He was late to achieve his developmental milestones.

Child B is 25 months old at the time of writing; she was also born at full-term via normal vaginal delivery following an uncomplicated pregnancy. All of child B's milestones were delayed and she was small for her age. Both children were referred to early intervention team.

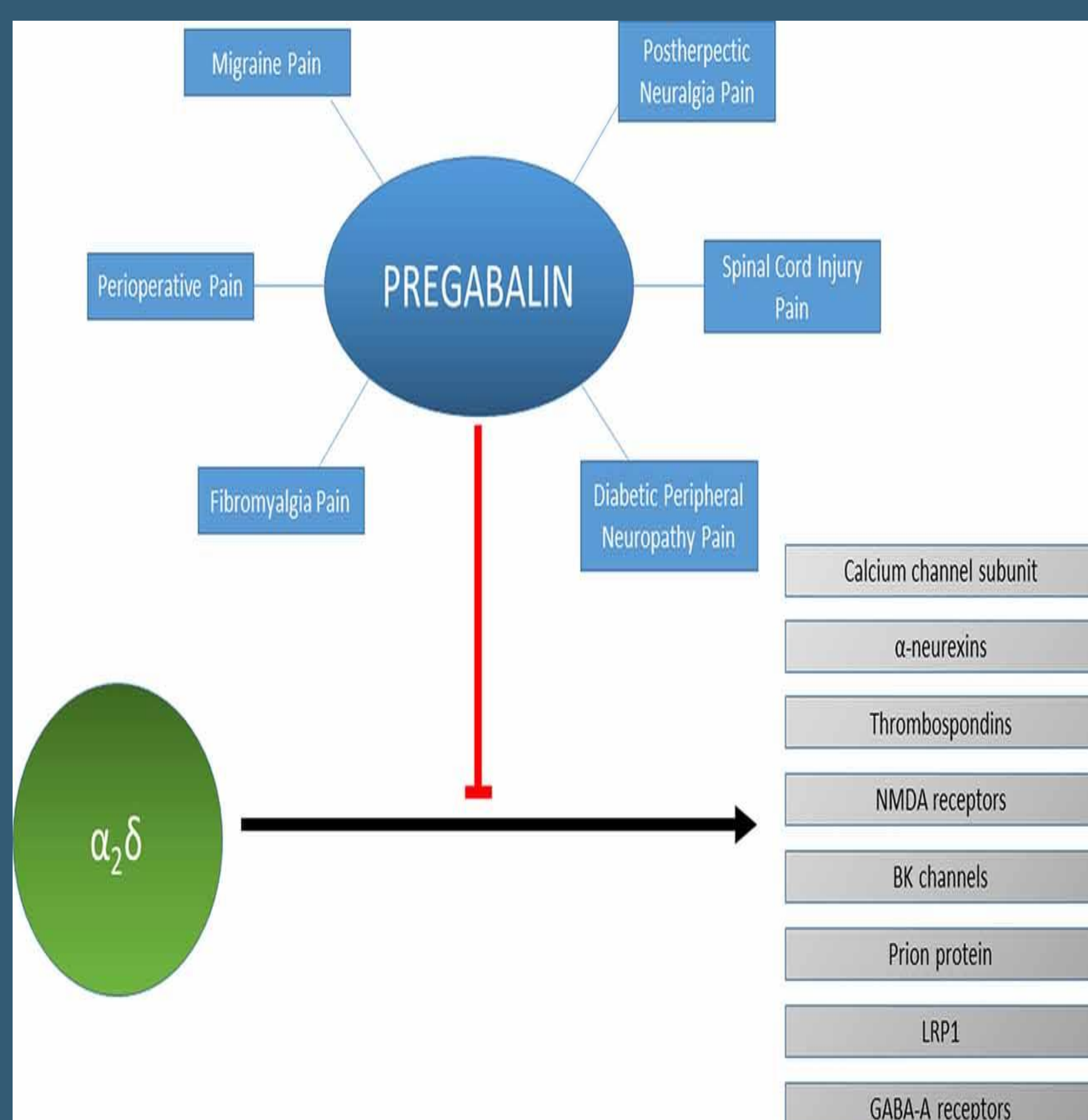
## Discussion:

GDD can be defined as significant delay in two or more developmental domains: e.g. gross and fine motor; speech and language; cognition; personal and social development; or activities of daily living.

There are few studies which examine the effects of Pregabalin on pregnancy outcomes. Furthermore, there are even fewer studies which examine the immediate- and medium-term effects of Pregabalin on the developmental milestones of children with a history of intrauterine exposure to high-dose. However, available evidence suggest both increased adverse pregnancy outcomes and birth defects while fewer studies report developmental delay in human and animals.

## Conclusion:

Pregabalin might have caused GDD but more research is needed to conclude this.



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Consent of Case report: Written consent provided by patient for preparation, publication and presentation.

Ethical Approval: As per HSE and HRB guidelines ethical approval not required for this type of case report. Discussed with supervising consultant and clinical director.