CNS Spectrums

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Letter to the Editor

Cite this article: Esam Z, and Nazari Taloki Z (2024). Agomelatine: The Cinderella of migraine pharmacotherapy in pediatrics? *CNS Spectrums* **29**(6), 533
https://doi.org/10.1017/S1092852924002220

Received: 02 October 2024
Accepted: 06 October 2024

Keywords:
Agomelatine; Migraine; Pediatrics; Pharmacotherapy; Melatonergic; 5-HT2C receptors; Inflammation

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Agomelatine: The Cinderella of migraine pharmacotherapy in pediatrics?

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Dear Editor

With great interest, we have read the unique research paper entitled "Successful agomelatine monotherapy for an adolescent with attention deficit hyperactivity disorder and comorbid migraine."[1] Respectfully, we want to extend the results of this valuable and pioneering research to the probable therapeutic potential of Agomelatine in children's migraine.

There is considerable evidence suggesting the melatonergic system and the safe nutraceutical/clinical agent Melatonin play an un-ignorable role in the pathogenesis and management of migraine, respectively. Melatonin has even a confirmed position in prophylaxis and treatment of migraine in pediatrics.[2] Considering the vasodilation as well as inflammation, as the most discussed mechanisms of migraine, it is not a serendipitous effect from Melatonin as a vasoconstrictor.

In the same direction, it has been demonstrated that drugs that act on Melatonin receptors, such as the modern antidepressant Agomelatine, can affect migraine, as well.[3] Aside from its effects through the melatonergic system, its antagonistic activity on Serotonin 5-HT2C receptors cannot be underestimated, because since 1993 it has been shown that the neurotransmitter Serotonin is able to induce endothelium-dependent vasodilation via the 5-HT2C receptors.[4]

Although it has not been considered yet, regarding the numerous published researches which are emphasizing the safety and efficacy of Agomelatine in children and adolescents with different neurological disorders,[5] it arises to mind that this Melatonin receptor agonist deserves more attention and appraisal as an efficient novel treatment of migraine in pediatrics. Your journal with the above-mentioned contribution is the pioneer.

Author contribution. Investigation: z.e., z.n.t.; Project administration: z.e., z.n.t.; Supervision: z.e., z.n.t.; Writing – original draft: z.e., z.n.t.; Writing – review & editing: z.e.; Conceptualization: z.n.t.; Validation: z.n.t.

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