

Letter to the Editor

Treatment of bruxism with hydroxyzine: a possible mechanism of action

Dear Editor,

We read recent article by Ghanizadeh with great interest¹. In the paper author reported own experience with hydroxyzine in the treatment of bruxism. Bruxism is defined as habitual non-functional clenching or grinding of teeth that usually occur during sleep or less commonly in daytime. It is linked to a wide spectrum of disease including cardiovascular diseases². Two main theories have been hypothesized in the pathogenesis of bruxism. First theory suggests peripheral local morphological disorders like malocclusion as the potential cause, whereas second theory assumes, that central disturbances in the area of the basal ganglia are responsible. Especially, dopaminergic activation of striatum have been linked to bruxism³.

Hydroxyzine is a first-generation potent H1 receptor inverse agonist. In addition to its antihistaminergic efficiency, hydroxyzine has also antidopaminergic activity. The possible pharmacopathological link between hydroxyzine's antidopaminergic action and disturbances in the central dopaminergic system of bruxism explains its efficiency in the treatment of bruxism.

Conflict of Interest

None.

References

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- 3) BEHR M, HAHNEL S, FALTERMEIER A, BÜRGERS R, KOLBECK C, HANDEL G, PROFF P. The two main theories on dental bruxism. *Ann Anat* 2012; 194: 216-219.

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