

Evaluation of sedative effect and safety of pregabalin in uncooperative children in dental clinic

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Abstract

Background and Aims: Treatment of uncooperative children is a challenging issue in pediatric dentistry. Pedodontists are interested in medications with mild sedative effects. The aim of the current study was to evaluate the sedative effect and safety of pregabalin in uncooperative children.

Materials and Methods: Twenty-one children were included in this randomized crossover, double-blinded placebo-controlled clinical trial. Each child participated in two separated dental visits. Pregabalin or placebo was given randomly at the first visit and the alternative was used at the second visit. Ramsay Sedation Scale and Frankl behavioral rating scale were used to evaluate the efficacy of the premedication. These scales were scored 2.5 hours after premedication. The data were analyzed with the Mann-Whitney U test. The comparison of the number of the “successful” treatments was done using the Chi-square test. Monitoring of the vital signs was done under the supervision of an anesthesiologist throughout the treatment procedure.

Results: Sedation level of the children during the dental treatment was significantly higher in the pregabalin group than in the placebo group ($p=0.007$). The Children’s behavioral rating score during the dental treatment was not significantly different between the two groups ($p=0.067$). The number of treatments which are finished “successfully” was more in the pregabalin group ($p=0.013$). Children’s vital signs during the entire treatment procedure were within the normal range.

Conclusion: Pregabalin provides sufficient safety in children. A significant sedative effect is anticipated to be seen from 2.5 hours after orally given pregabalin in children. Sedative effect of pregabalin results in more successful treatment procedures in uncooperative children.

Key words: pregabalin, behavior management techniques, sedative effect.