

# Behavioral management using sequenced treatment paradigm and audiovisual distraction during dental treatment in children with attention deficit/hyperactivity disorder

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Abstract

## OBJECTIVE:

The present study aimed to assess behavioral management using sequenced treatment approach and audiovisual distraction (AVD) with/without video eyewear during dental procedure in children with attention deficit/hyperactivity disorder (ADHD).

## MATERIALS AND METHODS:

This clinical trial included 31 children (n = 21 boys; n = 10 girls), aged between 6.5 and 8.1 years, distributed into Group A (n = 17, children not on ADHD medication) and Group B (n = 14, children taking medication for ADHD symptoms). The study involved four sessions, 1 week apart. Sessions I and II included behavioral management assessment and dental screening, respectively, while participants watched cartoon movie using an AV distracter with/without a video eyewear. During Sessions III and IV, dental prophylaxis and sealants were placed on first permanent molars, respectively, for both upper and lower jaws in both the groups. During the procedure, children were distracted with AV distracter with/without a video eyewear, and the mean changes in blood oxygen saturation (SaO<sub>2</sub>) and pulse rate were recorded every 5 min. Independent samples t-test was used, assessing for significant changes in pulse rate and SaO<sub>2</sub> during each visit in both groups.

## RESULTS:

Almost 95% (n = 113) of the first permanent molars showed signs of pit and fissure demineralization of varying severities, classified as the International Caries Detection and Assessment System-codes 1-3. During Session IV, there were significant differences ( $P \leq 0.03$  and  $P \leq 0.05$ ) in mean pulse rate in both groups of children, respectively, during fissure sealants or preventive resin restoration application on their permanent molars while being distracted using AVD with video eyewear.

## CONCLUSION:

Our study recommends splitting of dental visits into multiple short sessions and video eyewear distraction for optimum behavioral management during dental procedures of children with ADHD.