2504 Occlusal Hard Plates Effects on the Growth of Bruxist Children

I. MEDINA, C. RESTREPO, A.M. MEJIA, A. PELÁEZ, E. ALVAREZ, and G. GALLEGO, Instituto de Ciencias de la Salud, Medellín, Colombia

Objective: The aim of the present study was to evaluate the effects of the hard plate used for the treatment of bruxism, on the growth of the alveolar base of the maxillary bone during a 6 month period. Methods: All the subjects were three to six year old, were healthy and presented dental wear. The children were included as bruxist when their anxiety level was above 0.75%, according to Conners’ Parents and Teachers Rating Scales (CPRS and CTRS), their parents related diurnal or nocturnal audible occlusal sounds, presented 2 or more signs of temporomandibular disorders according to Bernal and Tsamtsouris and pathological dental wear. The dental wear was drawn, acquired in digital format and processed automatically. The children were randomly distributed in the experimental (n=15) and control group (n=15). Dental casts to evaluate the dental wear and arch dimensions, were obtained for each child with standardized technique. Perimeter, length, intercanine and intermolar distance were obtained from each cast before and after using an occlusal hard plate for 6 month. The four measurements were compared between the two groups and among the same group before and after the therapy using the t-student. Results: The results showed not statistically significant differences in the dimensions of the upper arch before and after the treatment in the experimental group, and there were also no statistically significant differences between the experimental and control group. Conclusion: The hard plate doesn't seem to affect the growth of the maxillary alveolar base in the studied children during a six month period, but this was a pilot study, so further longstanding studies with more children are necessary to affirm the hard plates for the treatment of bruxism don't affect the growth in bruxist children with primary and mixed dentition.

Seq #264 - Muscle Development and Function (Human)
2:00 PM-4:00 PM, Friday, 11 March 2005 Baltimore Convention Center Exhibit Hall E-F

Back to the Craniofacial Biology Program
Back to the IADR/AADR/CADR 83rd General Session (March 9-12, 2005)

Top Level Search