CFAO GRADUATE STUDENT POSTERBOARD ABSTRACTS

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DENTAL, SKELETAL AND GROWTH EFFECTS OF MALOCCLUSIONS TREATED WITH THE VAN BEEK HEADGEAR ACTIVATOR AND COMPREHENSIVE FIXED ORTHODONTIC APPLIANCES - PRELIMINARY FINDINGS

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OBJECTIVE: To assess the dental and skeletal treatment and growth changes in growing Class II malocclusions with the van Beek Headgear Activator appliance followed by full fixed orthodontic treatment.

MATERIALS AND METHODS: The treatment group consisted of 40 growing patients (20 males, 20 females, mean age 11.8 +/- 1.3 years) with Class II malocclusions that met the inclusion criteria and were treated under the supervision of one instructor (W.A. Wiltshire) with a first phase of van Beek Headgear Activator followed by a second phase of full fixed orthodontic appliance treatment. Lateral cephalometric radiographs were taken for all subjects pretreatment (T0) and after the completion of the second phase of treatment (T2) and a subgroup of the treatment group had lateral cephalometric radiographs taken after the completion of the first phase of treatment (T1). Dental, skeletal and growth effects were assessed by sagittal, vertical, and angular cephalometric parameters.

RESULTS: Comparison of the cephalometric radiographs showed a decrease in ANB angle (T1 = -1.9º; T2 = -2.3º), Wits value (T1 = -2.1mm; T2 = -4.2mm), and overjet (T1 = -4.4mm; T2 = -5.9mm) with an increase in SNB angle (T1 = +1.1º; T2 = +1.4º) and Harvold difference (T1 = +3.9mm; T2 = +5.4mm).

CONCLUSIONS: The van Beek Headgear Activator was found to be an effective treatment modality in the correction of Class II malocclusions in growing patients.