



Abdolreza Jamilian

University of Bolton, London, United Kingdom

Title: The effects of face mask and reverse chin cup on maxillary deficiency in growing patients: a randomized clinical trial

Abstract:

Introduction: The aim of this randomized clinical trial was to assess the differences in the effects of face mask and reverse chin cup on maxillary deficient growing patients.

Methods: The sample consisted of 42 class III patients with maxillary deficiency randomly divided into two equal groups. Twenty-one patients (10 males and 11 females) with a mean age of 8.9 (SD: 1.4) years were treated with a face mask for 18 (SD: 2) months. Twenty-one patients (9 males and 12 females) with the mean age of 9.2 (SD: 1.1) years were treated with a reverse chin cup for 19 (SD: 4) months. Cephalometric radiographs were taken at the beginning and end of treatment and the cephalometric measurements were analyzed. Paired t-tests and a Wilcoxon test were used for intra-group evaluations. Mann-Whitney test was used for inter-group evaluations.

Results: Sella-Nasion-A point (SNA) was increased by 1° (SD: 1.7°) ($P < 0.003$) and 1.8° (SD: 1.7°) ($P < 0.001$) in the face mask and reverse chin cup groups, respectively. The IMPA decreased by 4.1° (SD: 6.5°) in face mask group ($P < 0.009$) and 3.1° (SD: 4.7°) in the reverse chin cup group ($P < 0.008$). However, no statistically significant differences were seen in changes between the two groups.

Conclusion: Both face mask and reverse chin cup appliances are successful at moving the maxilla forward.

Biography

Abdolreza Jamilian is a researcher and specialist in field of Orthodontics. He received his D.D.S (1991), MSc in Orthodontics (1998), and Fellowship of Orthognathic Surgery & Craniofacial Syndroms (2010) from the Shahid Beheshti University in Tehran, Iran. He obtained his European Board of Orthodontics in 2013. Now he is Module leader at City of London Dental School, University of Bolton, London, UK and professor of Orthodontics in Azad University in Tehran. He has lectured in several international congresses and has been a consultant for various journals. He has published over 200 original peer reviewed research and review articles, 15 book chapters and more than 300 scientific communications. He holds 3 patents in United States Patent and Trademark Office. His areas of interest include class 3 malocclusion and maxillary deficiency.