<table>
<thead>
<tr>
<th>Title</th>
<th>Reverse headgear treatment in mixed dentition for girls with UCLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>So, LLY</td>
</tr>
<tr>
<td>Citation</td>
<td>72nd General Session and Exhibition of the International Association for Dental Research, Seattle, WA, USA, 10-13 March 1994, v. 73 n. Sp Iss, p. 362</td>
</tr>
<tr>
<td>Issued Date</td>
<td>1994</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/10722/54374">http://hdl.handle.net/10722/54374</a></td>
</tr>
<tr>
<td>Rights</td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</td>
</tr>
</tbody>
</table>
2079 Profile changes following mandibular advancement surgery using seven orthodontic treatment

Conventional cephalometric soft tissue (CST) measures give a limited description of the
2080 complexity of the profile. This study examined the relationship among CST measures,
2080 including and cephalometric soft tissue metrics. A subgroup of 35 subjects from the
2080 total group was randomly selected for CST analysis. The CST measures were
2080 obtained from the occiput to the nasion, and nasion to the Frankfort plane. The
2080 significance of the CST measures was determined using ANOVA and Tukey's post-
2080 hoc test. The results showed that the CST measures were significantly different
2080 between the groups. The CST measures were used to evaluate the effects of mandibular
2080 advancement surgery. Supported by NIDR DE07160, DE069360, DE08715.

2081 REVERSE HAIRGAUR TREATMENT IN MIXED DENTITION FOR GIRLS WITH UCLP
2081 L. GO

2082 Regional Orthodontic Club of Christ. Dent. & Orthod., the University of Hong Kong, HONG KONG.

AIM: To study the skeletal and dental changes in the vertical dimension due to treatment with reverse hairgaur in Southern Chinese girls in complete unilateral cleft lip and palate (UCLP).

MATERIALS AND METHODS: A retrospective study was conducted on 10 girls with UCLP (7 girls with left cleft and 3 girls with right cleft). The mean age at the start of treatment was 7.6 years, and the mean duration of treatment was 5.4 years. All patients received a combination of orthodontic and surgical treatment. The cephalometric changes were measured using the ANB angle, overjet, overbite, and the lower incisor inclination.

RESULTS: The results showed that the skeletal and dental changes in the vertical dimension were significant. The ANB angle decreased significantly (p<0.05), while the overjet and overbite increased significantly (p<0.05). The lower incisor inclination improved significantly (p<0.05).

CONCLUSIONS: Reverse hairgaur treatment for girls with complete unilateral cleft lip and palate during the mixed dentition stage produced significant improvement in the vertical dimension. This treatment led to favorable vertical jaw relationships. No significant differences were found for the vertical changes.

A Serial Tomographic Study of Limited Lip Bumper Therapy. M. DAVIDOVITZ.

2083 DM MCINNIS, WT LEA, SJ LINDAUXER (Virginia Commonwealth University, Richmond, VA, USA). Current) study evaluated the serial changes of the maxillary arch, including the primary eruption of the maxillary incisors, effect of maxillary advancement on the maxillary growth, and the changes in the vertical dimension of the maxillary arch.

MATERIALS AND METHODS: A total of 20 patients with maxillary clefts were included in the study. The patients were divided into two groups: Group A (n=10) received limited lip bumper therapy, and Group B (n=10) received no treatment. The maxillary arch form and the vertical dimension were assessed using cephalometric radiographs at baseline and after treatment. The changes in the ANB angle, overjet, and overbite were measured.

RESULTS: The results showed that the maxillary arch form improved significantly in Group A (p<0.05). The ANB angle decreased significantly (p<0.05), while the overjet and overbite increased significantly (p<0.05). The changes in the vertical dimension were not significant between the two groups.

CONCLUSIONS: Limited lip bumper therapy is an effective treatment for maxillary clefts, improving the maxillary arch form and the vertical dimension. Further studies are needed to evaluate the long-term effects of this treatment.

2085 Changes in Cephalometric "A" Point with Maxillary Protrusion. S. SHANNKEY, M. BECK, C. YIU, U. HAGG, M. HEW. W. POON, W. PONG (The Ohio State Univ., College of Dentistry and the University of Hong Kong).

Previous studies have shown that changes in cephalometric landmarks, point "A" can result from maxillary advancement or localized remodeling. The purpose of the current study was to determine the relative contribution of skeletal movement and localized remodeling to "A" point changes following treatment with maxillary protrusion (MP). Subjects consisted of 120 subjects with maxillary clefts. Cephalometric radiographs were taken at baseline and after treatment. The changes in the vertical dimension of point "A" were measured using ANOVA and Tukey's test. The results showed that the changes in the vertical dimension of point "A" were significantly different between the groups (p<0.05). The changes in the vertical dimension of point "A" were primarily due to maxillary advancement and localized remodeling.

2086 A Prospective Study of Apical Root Resorption in Orthodontic Patients. BW BECK, RC KIELM, EB KARR (Department of Orthodontics, University of Tennessee, Memphis).

Extensive studies of how orthodontic treatment causes external apical root resorption (EARR) extend back to early in this century, but virtually all studies have been retrospective. The purpose of this ongoing project is to prospectively monitor presence and severity of EARR from initial diagnostic records through comprehensive treatment. We have followed patients for at least 6 months into treatment and beyond. The teeth evaluated were approximately 2 mm in the crown, 2 mm in the root, 2 mm in the periodontal ligament, and 2 mm in the bone.

Several prior studies have indicated that upper incisor roots lost about 2 mm in the course of treatment, but the rate of root loss was not measured. EARR is easier to detect in teeth with more than one surface resorption. We conclude that the treatment differences between extraction and nonextractions are small and insignificant compared to the between subject variability found post-treatment.

2088 Change in Soft Tissue Profile Following Extraction and Nonextractions Therapy. B.J. GONZALEZ, R.F. CEREL, R. ALEXANDER, P.R. BUSCHUNG (School of Dentistry, Duke University, USA).

This study compared the effects of orthodontic therapy on the profile in "borders" extraction and nonextractions patients. The sample includes 38 extraction and 38 nonextraction (50 males and 50 females) subjects. The patients were selected based on crowding, age, arch form, and incisal edge of the tooth. The nonextraction group was matched to the extraction group based on age, sex, class of malocclusion, crowding, overbite, and overjet. Five profile measures were evaluated: facial convexity, facial profile, Holoway soft tissue angle, upper lip to E line, lower lip to E line, and nasobial angle. The results showed that the extraction group had a more favorable profile compared to the nonextraction group, with significant differences in facial convexity and facial profile.