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<th><strong>Title</strong></th>
<th>Soft tissue comparisons of Chinese and Caucasian surgical class III patients</th>
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<td><strong>Author(s)</strong></td>
<td>Ngan, P; Hagg, EUO; Yiu, C; Merwin, D; Wei, SHY</td>
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Comparison of standard reference of Swedish young adults with normal occlusion using soft tissue analysis with natural head position. The purpose of this study is to know the value of the Japanese young adults with normal occlusion using the same analysis as in the Swedish young adults. The study is performed in 5 different categories: 1. Normal (30% of the sample), 2. Vertical (10% of the sample), horizontal, 3. Vertical (9% of the sample), horizontal, 4. Vertical (15% of the sample), horizontal, 5. Vertical (12% of the sample), horizontal.

Results: The results show that the Japanese sample has a higher prevalence of normal occlusion compared to the Swedish sample. The prevalence of vertical malocclusions was also higher in the Japanese sample. The study provides valuable insights into the facial profile in Japanese adults.

962 Craniofacial Growth of Mandibular Prognathism during the Pubertal Growth Period. J. ISHIZAWARA, E. SAKAMOTO, M. UMEMORI and H. MIYAMOTO (Tokushima University, Sendai, Japan).

The purpose of the study is to investigate whether or not patients with mandibular prognathism would show a growth of their face during the pubertal growth period. The patients selected were followed longitudinally from age 10 to 15 years of age. The results showed that the mandibular growth was more pronounced during the pubertal growth period compared to the pre-pubertal period. The study has important implications for the treatment of mandibular prognathism.

963 Tongue volume in humans with mandibular prognathism. D. EAKLE, J. MURAKAMI, E. TARADA, F. TSUCHIYA, and M. SAKUDA (Osaka University, Osaka, Japan).

We examined whether the tongue volume in subjects with mandibular prognathism was larger than that in those with good occlusion and whether the tongue volume was accounted for by the morphological characteristics of the oral cavity and the tongue muscle. The results showed that the tongue volume was significantly increased in subjects with mandibular prognathism. Additionally, the relationship between the tongue volume and the overjet was also examined. The results showed that the tongue volume increased with increasing overjet.

964 Craniofacial morphology in Korean patients with Class II malocclusion. G.D. SINGH, K.A. NAMJAIKA, J.S. MIGEL, and G. LPSANOFF (University of Illinois at Chicago, College of Dentistry, Chicago, IL and University of Mississippi, MS).

There is little information concerning differences in the cranial base in Class II malocclusion in different ethnic groups, particularly those found in S.E. Asia. Therefore, the aim of this study is to determine the differences in cranial base morphology evident in patients with Class II malocclusion across diverse ethnic groups. Lateral cephalograms of approximately 70 Korean children aged between 5-11 years with Class II malocclusion were used for the study. The results showed that there were significant differences in cranial base morphology between the Korean sample and the other ethnic groups. The study has important implications for the treatment of Class II malocclusion.


The purpose of this study was to compare the soft tissue morphology of Chinese and Caucasian Class III patients who were treated for orthognathic surgery. The cephalometric magnification of 30 Chinese and 30 Caucasian patients were included in the study to analyze for race and sex differences. Thirteen soft tissue measurements were evaluated. Two sample t-test was used for the analysis. The results showed that there were significant differences in soft tissue measurements between the two groups.

966 Crown dimensions in ethnic Chinese normal occlusions versus Class II malocclusions. K.W.C. FOOYEN, S.S. KIM, M. MOYAMADA and B.L. LOW (Faculty of Dentistry, National University of Singapore).

The analysis of malocclusions attitudinal to darkening in tooth sizes has been reported by Bolton (Angle Orthod. 28:113-135, 1958). Finishing an orthodontic case with Class II incisors and posterior occlusal interference relates to great attention on the relative harmony in mesio-distal widths between the maxillary and mandibular teeth. The aim of the present study was to determine a Bolton ratio for the Chinese racial group. To test this, a cephalometric study of 100 Chinese patients was conducted. The patients were divided into two groups: Class II malocclusions and a control group of Class I occlusions. The results showed that there were significant differences in tooth size between the two groups.

967 Expected Values of Outcomes for Age Related Orthodontic Decisions. K. VIGG, B. VIGG (College of Dentistry, Ohio State University, Columbus, Ohio, U.S.A.)

Decision analysis may be employed to calculate the expected values of outcomes when clinical decisions are taken under conditions of uncertainty and when alternative pathways are opposed to specified endpoints. One aim was to compute the values of probabilities of payoffs, or utilities, to be expected from comparing treatments begun prior to and after the age of 15 years. METHODS: Retrospective data of 995 patients (399 CL, 1,568 CHL, and 217 CHL) was provided to the results. The study shows that in Chinese sample, bone loss was found in a dentitional age. RESULTS: Decision Analysis revealed that [expected values for earlier treatment were greater than for later (216:209) [in both age groups the non-inversion decision has a higher expected value than the other one]. CONCLUSIONS: 1. Decision analysis can be applied to compare alternative orthodontic treatment options with respect to specified attributes of outcomes. 2. Such analyses can optimize the planning stage of orthodontic treatment. 3. Outcomes may be indirectly predicted by using values with the highest yield of motivated endpoints in patients with. 4. Validation of the model is necessary for application to patient populations with different clinical characteristics and for utilities.

968 Decision Analytical Comparison: One vs. Two-Stage Orthodontic Treatment Strategy. P. VIGG, B. VIGG (College of Dentistry, Ohio State University, Columbus, Ohio, U.S.A.)

As an estimate of ‘payoff’ to patients scarified from orthodontic treatments, may be diverted by subtracting the value, or ‘utility’ of obtaining a reduced malocclusion severity (%PAR reduction), under expected outcomes such as treatment of long duration (31) and the loss of teeth (24) required for orthodontic treatment. These estimates of net gain, or benefits, can be incorporated in a Decision Analysis Model at the ‘terminal nodes’ of our tree. Also was to compute the payoff expected to be experienced immediately from one-stage (N=183) and two-stage (N=47) treatment of 256 Class II div. 1 children between ages 11 and 14 years. METHODS: Decision Trees were constructed using "DATA " 2.5 & 2.6 - tree software. Frequency distributions of variables [PAR reduction, D, and Xi] provided probability estimates at chance nodes. Payoffs were calculated by combining the probability and the value of each attribute of the treatment. The results showed that the two-stage strategy had a higher expected value (237%259) than the one-stage strategy (251%). Sensitivity analysis indicated that the model was robust for a wide range of the decision trees. RESULTS: The one-stage strategy was favored by 31% patients, the two-stage treatment by 69%. CONCLUSION: 1. This model was the sensitivity of fire duration of treatment and loss of teeth and the "utility" of dental alignment requirements. 2. Under these conditions, the preferred strategy for 11-14 year old Class II div. 1 patient to be one-stage treatment. 3. Further research is necessary in terms of the cost, utilities, costs, and psychometric variables related to satisfaction is necessary for a more complete analysis.