

Aim: The aim of the study is to evaluate the correlation of lip prints and dermal prints with skeletal base relationship, to find the correlation between lip prints and the dermal prints and to evaluate if any significant difference existed among genders.

Materials and Methods: The study involved 120 subjects: According to Reidel's classification of Malocclusion the samples were divided into 3 groups - 40 Class I, 40 Class II, 40 Class III. The lip prints, finger prints and palm prints of all 120 subjects were recorded using cellophane technique and the data analysis was accomplished using SPSS version 22.0. Chi square test was done for intergroup comparison. ANOVA test was done to find the statistical significance of atd angle and a-b ridge count.

Results: Branched lip pattern was seen in Class I and II skeletal malocclusion whereas Vertical lip pattern was observed in Class III patients. Right loop pattern was prevalent among the South Indian Population as well as in all the 3 study groups. The a-b ridge count and atd angle was higher in Class I individuals. Both males and females showed a majority of branched lip pattern.

Conclusion: Dermatoglyphics and Cheiloscopy can serve as an easy, accessible, inexpensive and noninvasive method of exploring the genetic associations of malocclusion and for timely prevention. But due to other ethnic, environmental factors they are not completely reliable.

Key Words: Lip prints, Palm prints, Finger prints, skeletal malocclusion.