

Cheiloscopy: A Study on Predominant Lip Print Patterns among the Gujarati Population

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Abstract : Cheiloscopy, the study of lip prints, is a tool in forensic investigation technique that deals with identification of individuals based on lips patterns. The objective of this study is to determine predominant lip print pattern found among the Gujarati population, to evaluate whether any sex difference exists and to study the permanence of the pattern over six months duration. The study comprised of 100 healthy individuals (50 males and 50 females), in the age group of 18 to 25 years of Gujarati population of the Gandhinagar region of the Gujarat state, India. By using Suzuki and Tsuchihashi classification, Lip prints were then divided into four quadrants and also classified on the basis of peripheral shape of the lips. Materials used to record the lip prints were dark brown colored lipstick, cellophane tape, and white bond paper. Lipstick was applied uniformly, and lip prints were taken on the glued portion of cellophane tape and then stuck on to a white bond paper. These lip prints were analyzed with magnifying lens and virtually with stereo microscope. On the analysis of the subject population, results showed Branched pattern Type II (29.57 percentage) to be most predominant in the Gujarati population. Branched pattern Type II (35.60 percentage) and long vertical Type I (28.28 percentage) were most prevalent in males and females respectively and large full lips were most predominantly present in both the sexes. The study concludes that lip prints in any form can be an effective tool for identification of an individual in a closed or open group forms.

Keywords : cheiloscopy, lip pattern, predominant, Gujarati population

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