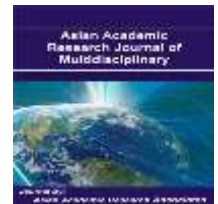




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IS THE PALATAL RUGAE PATTERN AS UNIQUE AS A FINGERPRINT?

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Abstract

The palatal rugae patterns are widely considered to remain unchanged during an individual's lifetime. Given the invariance and stability of the rugae pattern, the palatal rugae themselves are equivalent to fingerprints and thus considered relevant for the identification of victims. The aim of the study is to establish, individual identity using palatal rugae patterns. The research consisted of 80 study models, 51% were females and 49% were men, separated into three age groups: 10 to 20 years (42%), 21 to 40 years (33%) and over 41 years old (25%). This study treats the shape, length and width of the rugae as well as their distance from both palatine raphe and incisive papilla. Each individual had different rugae patterns including fraternal twins and the rugae patterns were not symmetrical, both in number and in their distribution regardless of the gender and age. This preliminary study has shown that there are no two identical palates in terms of their rugae pattern. The palatal rugae possess unique characteristics as they are absolutely individualistic and therefore, can be used as a personal oral print for identification in forensic cases.

Keywords: palatal rugae, personal identity, rugae pattern

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