

Conference Abstract

DAY 1 15th September 2023 (Friday)

ORAL 1

2.00-3.30 pm

Scientific Session 3

A study of morphological and morphometric analysis of palatine rugae patterns**G. Thrisha, Shivapriya, Seema SR**

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Background: The palatine rugae refer to the mucosal folds situated on the front portion of the palate, behind the incisive papillae in the roof of the mouth. They are also known as the 'Plica palatine.' Understanding the characteristics of these rugae can have valuable applications in various fields, including sex determination, forensic odontology, and orthodontics. The examination and analysis of these patterns are commonly referred to as palatoscopy. It is noteworthy that the development of palatal rugae patterns takes place during the third month of intrauterine life.

Aim: To identify the various patterns of rugae using maxillary mould. To evaluate the number and shape of the rugae pattern and its variation among genders of the same population.

Methodology: Thirty maxillary cast will be procured from the dental department of ESIC, Bangalore. To observe rugae pattern standard classification will be followed according to Thomas and Kotze. To assess the measurement digital vernier caliper will be used.

Result: The shape of the rugae will be carefully assessed by using magnifying hand lens. Measurements will be taken by using digital vernier caliper and detailed morphological and morphometric valuation with statistics will be discussed during presentation.

Conclusion: The primary objective of this study was to establish the prevalence of various biometric features associated with palatal rugae. These features hold significant value in the biological profiling of individuals and can serve as an alternative method of identification when conventional techniques like fingerprinting, dental recording, and DNA analysis are not applicable. It is worth noting that the characteristics of palatal rugae are distinct and vary between individuals.

Keywords: Palatal rugae, Maxillary mould, Plica palatine, Mucosal folds, Palatoscopy