## PERBEDAAN POLA DAN UKURAN *RUGAE PALATAL* PADA POPULASI TIONGHOA DAN POPULASI PAPUA DI SURABAYA

## DIFFERENCE OF PATTERNS AND SIZES OF PALATAL RUGAE BETWEEN CHINESE AND PAPUA POPULATION IN SURABAYA

## Abstract

Background: palatal rugae have been considered for human identification because of its stability and accuracy similar as fingerprints. The design and structure are unchangeable by chemicals, heat illness, trauma, or if palatal rugae destroyed, it would arrange the same as the previous form. Some cases may cause a change in the pattern of palatal rugae, such as finger sucking habit, orthodontic treatment and trauma. Palatal rugae utilization as one of the identification method shows accuracy because the unique morphology to each individual. Purpose: to determine difference of pattern and size of palatal rugae between the Chinese and Papua population in Surabaya. Methods: This study used observational analytic. The subjects of this study are all populations that meet inclusion and exclusion criteria. This study uses 60 people from the Chinese and Papua population in Surabaya as the subject. The data is secondary data by looking at the patient's upper jaw mold models to analyze patterns and sizes palatal rugae. Data analysis palatal rugae pattern differences using Mann-Whitney test, and data analysis palatal rugae size differences using Independent T-test test. Result: No significant difference of palatal rugae patterns in the whole area of the palatal rugae between the Chinese and Papua population, but there is a significant difference (p < 0.05) in the area of the palatal rugae Right A, B Right and Left B. Conclusions: There were no significant differences in palatal rugae pattern, but there were significant difference to the size of the palatal rugae between Chinese and Papua population in Surabaya.

**Keywords:** pattern of the palatal rugae, size of the palatal rugae, Chinese population in Surabaya, Papua population in Surabaya