

## INTISARI

Setiap ras memiliki ciri-ciri tertentu yang berbeda maka suatu standar ras tertentu tidak dapat digunakan sebagai standar ras yang lain. Perubahan lebar lengkung gigi dapat menyebabkan dimensi pola rugae palatina berubah karena adanya hubungan antara serat kolagen rugae palatina terhadap serat kolagen jaringan ikat gingiva. Tujuan penelitian ini untuk mengetahui hubungan antara lebar lengkung gigi terhadap dimensi pola rugae palatina pada maloklusi Angle klas I orang Jawa.

Penelitian ini menggunakan model studi mahasiswa Fakultas Kedokteran Gigi Universitas Gadjah Mada dengan metode *purposive sampling*. Seluruh sampel dilakukan pengukuran lebar lengkung gigi dengan metode Pont serta pengukuran dimensi pola rugae palatina menggunakan klasifikasi Thomas dan Kotze. Data dianalisis dengan analisis deskriptif dan uji korelasi Pearson.

Hasil penelitian menunjukkan orang Jawa dengan maloklusi Angle klas I memiliki rerata lebar interpremolar  $36,30 \pm 2,06$  mm; rerata lebar intermolar  $46,37 \pm 2,19$  mm; rerata dimensi pola rugae palatina anterior  $6,36 \pm 0,85$  mm; rerata dimensi pola rugae palatina posterior  $26,06 \pm 3,52$  mm; dan rerata dimensi pola rugae palatina fragmenter posterior  $27,91 \pm 2,86$  mm. Uji korelasi menunjukkan tidak signifikan ( $p > 0,05$ ). Kesimpulannya adalah lebar lengkung gigi tidak berhubungan dengan dimensi pola rugae palatina.

**Kata Kunci:** Lebar lengkung gigi, Dimensi pola rugae palatina, Maloklusi Angle klas I, dan Orang Jawa

### *ABSTRACT*

Every race must have some differences in character features. Therefore, the standard of the race not be compared. The development of the dental arch width can cause the changes in the rugae pattern dimensions. The situation above is caused by the relationship between the collagen fibers in the rugae palatine and the collagen fibers in the gingiva connective tissue. The objective of this study was to determine the relationship between dental arch width and the rugae pattern dimensions in Javanese with Angle's class I malocclusion.

This study used dental study models for students of the Faculty of Dentistry Gajah Mada University as the sample of the study. The researcher used purposive sampling to collect the data. In collecting the data, the samples were measured dental arch width using Pont's analysis method. Besides that, the researcher measured the rugae pattern dimensions using Thomas and Kotze classification. The data collection was analyzed using descriptive analysis and correlation tests.

The result of the study shows that: (1) Javanese with Angle's class I malocclusion have  $36,30 \pm 2,06$  mm average interpremolar width;  $46,37 \pm 2,19$  mm average intermolar width;  $6,36 \pm 0,85$  mm average of anterior rugae pattern dimensions;  $26,06 \pm 3,52$  mm average of posterior rugae pattern dimensions; and  $27,91 \pm 2,86$  mm average of posterior fragmenter rugae pattern dimensions. (2) The result of the correlation test is not significant ( $p > 0,05$ ). In conclusion, there is no correlation between the dental arch width and the rugae pattern dimensions.

**Key words :** Dental arch width, Rugae pattern dimensions, Angle's class I malocclusion, and Javanese