

ABSTRAK

Nama : Ayu Laksmi Puspitasari
Program Studi : Kedokteran Gigi Program Sarjana
Judul : Evaluasi Sefalometri Metode Downs pada Sefalogram di RSGM YARSI

Latar belakang: Downs memelopori penetapan norma standar sefalometri sebagai pedoman dalam perawatan ortodonti. Norma standar Downs tidak ideal untuk diterapkan sebagai nilai mutlak pada ras dan etnis lain karena adanya berbagai variasi wajah individu berdasarkan kelompok ras. Maka, nilai baku populasi Indonesia sangat diperlukan. Islam menyatakan adanya perbedaan dalam pola karakteristik setiap manusia. **Tujuan:** penelitian ini bertujuan untuk melakukan evaluasi sefalometri menggunakan metode Downs dengan sampel sefalogram di RSGM YARSI. **Metode:** Penelitian dilakukan dengan 51 sampel sefalogram yang terdiri dari 41 perempuan dan 10 laki-laki dari RSGM YARSI. Sefalogram ditracing dan dilakukan pengukuran sefalometri. Data diolah dengan uji *independent t-test* dan Mann Whitney U. **Hasil:** Besar rata-rata sudut fasial $85,31^{\circ} \pm 3,06$; sudut konveksivitas $3,97^{\circ} \pm 2,82$; sudut bidang AB $2,56^{\circ} \pm 2,97$; sudut bidang mandibula $29,62^{\circ} \pm 4,66$; sumbu Y $64,02^{\circ} \pm 3,38$; sudut bidang oklusal $11,09^{\circ} \pm 3,23$; sudut interinsisal $112,16^{\circ} \pm 7,64$; sudut LI-oklusal $28,29^{\circ} \pm 5,49$; sudut IMPA $10,59^{\circ} \pm 6,93$; jarak UI-APog $8,05 \text{ mm} \pm 1,85$. Terdapat perbedaan yang bermakna secara statistik ($p < 0,05$) dibandingkan norma standar Downs pada seluruh pengukuran. Terdapat perbedaan yang bermakna secara statistik ($p < 0,05$) antara perempuan dan laki-laki pada pengukuran dental. Terdapat perbedaan yang bermakna secara statistik ($p < 0,05$) dibandingkan ras lain. **Kesimpulan:** Nilai sampel RSGM YARSI dibandingkan norma Downs menunjukkan posisi dagu terhadap FHP yang lebih retroposisi, wajah lebih cembung, hubungan rahang bawah dan atas terhadap NPog lebih protrusi, arah pertumbuhan mandibula terhadap FHP lebih vertikal, arah pertumbuhan wajah lebih *downward*, pertumbuhan oklusal terhadap FHP lebih vertikal, dan gigi insisif lebih protrusi. Menurut Islam, pengukuran sefalometri dapat membuktikan ke-Maha-besaran Allah dalam menciptakan manusia yang memiliki kekhususan masing-masing.

Kata kunci: Sefalometri, Analisis Downs, RSGM YARSI

ABSTRACT

Name : Ayu Laksmi Puspitasari
Faculty : Dentistry Undergraduate Program
Title : Cephalometric Evaluation of Cephalogram in RSGM YARSI
by Downs Analysis

Background: Downs pioneered the establishment of standard cephalometric norms as guidelines for orthodontic treatment. Downs' standard norm is not ideal for application as an absolute value to other races and ethnicities because of the wide variation in individual faces by racial group. Thus, the standard value of Indonesia's population is needed. Islam states that there are differences in the characteristic patterns of each human being. **Objective:** this study aims to evaluate the cephalometry of cephalogram samples from YARSI General Hospital using Downs method. **Methods:** The study was conducted with 51 cephalogram samples consisting of 41 women and 10 men from RSGM YARSI. The cephalogram was traced and measurements were taken. Data were processed by independent t-test and Mann Whitney U. **Results:** The average mean of the facial angle are $85.31^{\circ} \pm 3.06$; angle of convexity $3.97^{\circ} \pm 2.82$; AB plane angle $2.56^{\circ} \pm 2.97$; mandibular plane angle $29.62^{\circ} \pm 4.66$; Y-axis $64.02^{\circ} \pm 3.38$, occlusal plane angle $11.09^{\circ} \pm 3.23$; interincisal angle $112.16^{\circ} \pm 7.64$; LI-occlusal angle $28.29^{\circ} \pm 5.49$; IMPA angle $10.59^{\circ} \pm 6.93$; distance of UI-APog $8.05 \text{ mm} \pm 1.85$. There was a statistically significant difference ($p < 0.05$) compared to Downs' norm in all measurements. There was a statistically significant difference ($p < 0.05$) between women and men on dental measurements. There was a statistically significant difference ($p < 0.05$) compared to other races. **Conclusion:** Values of RSGM YARSI samples compared to Downs norms shows that the position of the chin relative to FHP is more retropositioned, the face is more convex, the relationship of the lower and upper jaws to NPog is more protrusive, the direction of mandibular growth to FHP is more vertical, the direction of facial growth is more downward, occlusal growth to FHP is more vertical, and the incisors more protruded. According to Islam, cephalometric measurements can prove the greatness of Allah in creating humans with their own specialties.

Keywords: Cephalometry, Downs Analysis, RSGM YARSI