

INTISARI

Sindrom Down merupakan kelainan berupa non-disjungsi kromosom 21. Ekstra kromosom 21 menyebabkan karakteristik kraniofasial yaitu hipoplasi wajah tengah yang berakibat hidung kecil dan jarak intercanthal lebar. Penelitian ini bertujuan menganalisis proporsi hidung terhadap wajah anak sindrom Down usia 4-17 tahun di POTADS Kebumen dan Yogyakarta dibandingkan dengan normal.

Subjek penelitian 38 anak sindrom Down dibagi menjadi 3 kelompok, usia 4-7 tahun, 8-12 tahun dan 13-17 tahun. Soft file foto wajah subjek dari arah depan ditandai dengan titik landmark wajah menggunakan aplikasi CorelDraw untuk mengukur tinggi hidung (Nasion ke Subnasal), lebar hidung (jarak antar alare), tinggi wajah (Trichion ke Menton), dan lebar wajah (jarak bizygoma). Data yang didapatkan digunakan untuk menganalisis proporsi hidung terhadap wajah.

Hasil analisis foto pada sindrom Down menunjukkan rerata proporsi lebar hidung terhadap lebar wajah $0,31 \pm 0,1$, rerata proporsi lebar hidung terhadap jarak intercanthal $1,12 \pm 0,12$, rerata proporsi tinggi hidung terhadap tinggi wajah $0,22 \pm 0,01$, dan rerata indeks hidung sindrom Down $0,90 \pm 0,11$. Distribusi proporsi lebar hidung terhadap lebar wajah sindrom Down dan indeks hidung berada di atas rerata normal, tinggi hidung terhadap tinggi wajah sindrom Down berada di bawah rerata normal, dan proporsi lebar hidung terhadap jarak intercanthal merata.

Disimpulkan bahwa pada anak sindrom Down tinggi hidung relatif lebih rendah terhadap tinggi wajah, lebar hidung relatif lebih besar terhadap lebar wajah, indeks hidung lebih besar, dan jarak intercanthal cenderung sama dibandingkan normal.

Kata Kunci: jarak intercanthal, lebar hidung, lebar wajah, Sindrom Down, tinggi hidung, tinggi wajah

ABSTRACT

Down syndrome is a chromosomal abnormality resulting from non-disjunction of chromosome 21. This can manifest in a variety of clinical features, including mid-face hypoplasia, which is characterized by a small nose and a wide intercanthal distance. This study aims to analyze proportion of the nose to the face in Down syndrome children aged 4-17 years in POTADS Kebumen and Yogyakarta, compared with normal.

The study subjects were 38 children with Down syndrome, divided into three age groups: 4-7 years, 8-12 years, and 13-17 years. These facial photographs were obtained from the frontal perspective and marked with facial landmark points using the CorelDraw application for measure several parameters. These parameters included nose height (Nasion to Subnasal), nose width (inter alare distance), face height (Trichion to Menton), and face width (bizygoma distance).

The results of the photogrametry in subjects with Down syndrome revealed the mean proportion of nasal width to facial width to be 0.31 ± 0.1 , the mean proportion of nasal width to intercanthal distance to be 1.12 ± 0.12 , and the mean proportion of nasal height to facial height to be 0.22 ± 0.01 . The mean nasal index of Down syndrome was 0.90 ± 0.11 . The distribution of the proportion of the width of the nose to the width of the face of Down syndrome and the nasal index was above the normal mean, the height of the nose to the height of the face of Down syndrome was below the normal mean, and the proportion of the width of the nose to the intercanthal distance was even.

The study's findings indicated that in children with Down syndrome, nasal height relative to facial height, nasal width relative to facial width, nasal index, and intercanthal distance tend to be lower and larger, respectively, compared to typical values.

Keywords: *intercanthal width, Down syndrome, face height, face width, nasal height, nasal width.*