ABSTRACT

Aim and Objective:

To correlate the molar relationship with soft tissue profile in 4 – 5 yr old children in Chennai.

Material and methodology:

Profile photographs and impressions were made from 474 school going children of 4-5 age group of Chennai. Soft tissue profile measurements were made from the photographs. Terminal plane were analyzed from the casts made.

Results:

Out of 474 children, 257 had straight profile (mesial step 31.90%, distal step 5.83%, flush 160%), 200 had convex profile (mesial step 1%, distal step 71%, flush 28%), 17 had concave profile (mesial step 52.94%, distal step 11.76%, flush 35.29%). Significant difference is seen in nasolabial angle between boys and girls (p<0.005). There is significant correlation between the soft tissue profile and projection of upper lip and lower lip to chin. Total facial convexity angle, nasal tip angle showed significant difference between 4 and 5 year age group children. (p=0.000)** Significant correlation is seen between molar occlusal type and soft tissue facial profile. (p= 0.000)***
Significant correlation is seen between molar occlusal type and soft tissue facial profile angles. (facial convexity angle p=0.000 and total facial convexity angle p=0.000)***

Conclusion:

Findings of this study may be used as a clinical reference for assessing the normal norms of soft tissue profile and as the relationship between the soft tissue profile and primary occlusion is important for orthodontic diagnosis and treatment planning in pediatric dental patients.

KEY WORDS:

SOFT TISSUE PROFILE ANALYSIS, PRIMARY MOLAR OCCLUSAL TYPE, PHOTOMETRIC ANALYSIS.