

ANTERIOR FACE PROPORTIONS AND FACE HEIGHT-WIDTH RATIO IN GUJARATI POPULATION

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Abstract

Background& Aim: Anterior face measurements are required across various fields such as public health, apparel industries and many more. Very little or no data available on anterior face proportions and anterior face height-width ratio in Gujarati population. So the aim was to establish normal values of anterior face height, width and anterior face proportion in Gujarati population. **Methods:** 450 living subjects were measured for anterior face height (trichion-gnathion, tr-gn), anterior face width (zygion-zygion, zy-zy), Forehead height (trichion-glabella, tr-gl), Upper face height (glabella – subnasale, gl-sn) and Lower face height (subnasale-gnathion, sn-gn). **Results:** Mean values of anterior face height (tr-gn), anterior face width (zy-zy), forehead height (tr-gl), Upper face height (gl-sn) and Lower face height (sn-gn) were 175.36±13.89mm, 123.99±8.84mm, 50.75±9.63mm, 65.28±6.86mm and 59.33±8.96mm in males and 165.72±12.55mm, 117.59±8.9mm, 47.19±9.88mm, 64.22±6.74mm and 54.31±9.93mm in females respectively. Anterior face height-width ratio was < 1.55 in 83.18% of males and 80.51% of females, between 1.55-1.65 in 9.34% males and 10.6% of females and >1.65 in 7.48% of males and 8.89% of females respectively. Forehead height, upper face height and lower face height ratios were 29%, 37% and 34% in males and 28%, 39% and 33% in females respectively indicating that upper face height ratio is more in females compared to males and contribution of upper face is higher in Gujarati population. **Conclusion:** Data obtained from this study may be helpful in forensic investigations, orthodontics and facial plastic surgeries.

Keywords: Anterior face height, anterior face width, anterior face proportions, facial morphometry.

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