Growth Progression in Physical, Physiological and Sickle Cell Traits Among Porja Tribal Girls of Visakhapatnam District, Andhra Pradesh


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ABSTRACT A cross-sectional study was undertaken among Porja tribal girls in ITDA schools situated in the 4 mandals viz. Paderu, Araku valley, Ananthagiri, and Chingput of Visakhapatnam district of Andhra Pradesh during February 1996 to January 1998. The sample consisted of 288 healthy girls aged 0+ to 18+ years. In this paper, data on stature, body weight, upper arm, calf, chest abdominal and head circumferences and skinfolds at triceps, biceps, subscapular, suprailliac, abdominal, anterior thigh, medial calf, forearm sites and blood pressure, pulse rate and sickle cell trait are presented including patterns of change in these physical and physiological traits with advancement of age. It has been observed that there is progressively increase in all the dimensions with advancement of age except skinfolds. But homozygous (HbSS) and heterozygous (HbAS) sickle cell anemic Porja tribal girls have decelerating growth trend when compared to normal Porja tribal girls. Analysis of the data reveal that all the dimensions exhibited maximum mean annual increments between 11+ and 14+ years. Blood pressure and pulse rate increased with increase in age with minor fluctuations. These girls are shorter and heavier than the ICMR (1984) observations. The findings of the study can be used as a reference material for Porja tribal girls of Visakhapatnam district.