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Percentile growth charts for symmetric and asymmetric small for gestational age infants

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A ge and sex specific percentile growth charts for body weight and crown-heel length (CHL) of full-term 100 symmetric small for gestational age (SGA) (boys: 50, girls: 50), 100 asymmetric SGA (boys: 50, girls: 50) and 100 appropriate for gestational age (AGA) (boys: 50, girls: 50) infants representing upper socioeconomic strata have been presented. Ponderal Index (PI) was used to categorize SGA babies into symmetric SGA (PI \geq 2.2 g/cm³) and asymmetric SGA (PI < 2.2 g/cm³). Body weight and CHL of the babies were measured at birth, 1, 3, 6, 9 and 12 months of age in the Growth Laboratory/Clinic of Advanced Pediatrics Centre, PGIMER, Chandigarh, India using standardized techniques and instruments following a mixed-longitudinal growth research design. The 3rd, 5th, 10th, 25th, 50th, 75th, 90th, 95th and 97th percentiles were computed using formulae given by Tanner et al., (1966) after applying Healy's (1962) correction. The 50th percentile plotted for body weight and CHL of SGA and AGA infants demonstrated a continuous increase throughout infancy. As compared to their normal Indian, Western, MGRS and AGA counterparts, the curves plotted for SGA infants of the two types and sexes ran below throughout infancy. However, the magnitude of this deficit was recorded to be more in symmetric than asymmetric SGA infants. Growth charts provided may be used for comparative purpose and to detect nutritional deficits and growth aberrations of full-term SGA and AGA infants inhabiting north-western parts of India.

Biography

Harvinder Kaur obtained her PhD degree on the Growth of Symmetric and Asymmetric SGA infants from PGIMER, Chandigarh, India. Currently, she is working as Assistant Professor in Child Growth and Anthropology Unit of the Department of Pediatrics. She has over 15 years of experience in conducting longitudinal, auxological, nutritional and maturational studies on normal and sick children. She has published 22 research papers in Journals of National and International repute.

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