

GENERAL ARTICLE

GROWTH MONITORING IN INDIAN CHILDREN - RECENT CONCEPTS

***Hemchand K Prasad**
****Vaman Khadilkar**

Abstract: *Proper choice of growth charts and meticulous growth monitoring is an integral part of preventive pediatrics. The Infancy Childhood Puberty model of growth remains a valuable tool to interpret growth of children and narrow down the causes for deviant growth. The Indian Academy of Pediatrics (IAP) recommends that pediatricians use the IAP modified WHO 2006 chart for children below five years and new pediatrician friendly IAP growth charts in children above 5 years. The new Body Mass Index (BMI) look up tool is useful in children above 8 years and complements BMI interpretation using the growth charts. The mid parental height calculator obviates need for calculation of target height and helps interpret the child's height in the perspective of parental height. The cut-offs for recognition of abnormal growth are predominantly prescriptive and linked to diseased states. New growth charts have been developed for interpretation of waist circumference, growth velocity, body proportions and mid upper arm circumference in Indian children. The cut-offs in these charts include 70th percentile, 25th percentile, 2SD and 25th percentile, to identify cardio-metabolic risk, growth faltering, disproportionate short stature and thinness, respectively. The extended growth charts are useful diagnostic tools in growth clinics and NICU follow up clinics. Growth charts for Indian girls with Turner syndrome are available for use. Synthetic growth charts are exciting potential areas for future research in childhood growth.*

Keywords: *Growth monitoring, Pediatrician friendly growth chart, BMI look up tool, MPH calculator.*

Points to Remember

- ***Pediatricians should use the Intergrowth 21 at birth charts, IAP modified WHO charts and pediatrician friendly growth charts for growth monitoring at birth, below 5 years and above 5 years, respectively.***
- ***Pediatricians should follow the IAP growth monitoring guidelines to measure growth in children.***
- ***The new BMI look up tool should be used to identify underweight, overweight and obese children above 8 years of age.***
- ***The new mid parental height percentile calculator may be used to assess the child's height in the perspective of the parental height.***
- ***Abnormal growth should be identified based on standard definitions as per WHO and IAP recommendations.***
- ***The Indian waist circumference charts, proportion charts and growth velocity charts should be used as necessary.***
- ***Extended growth charts for Indian children are useful in growth clinics and NICU follow up clinics.***

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* Consultant Pediatric Endocrinologist,
Department of Pediatric Endocrinology,
Mehta Children's Hospital,
Chennai
email : hemchan82@gmail.com

** Consultant Pediatric Endocrinologist,
Growth and Pediatric Endocrine unit,
Hirabai Cowasji Jehangir Medical Research Institute,
Jehangir Hospital,
Pune.

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