

Current practices in evaluation of Hypertension (HTN) in children and adolescents

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Over the past few decades, there has been a substantial increase in the prevalence of overweight and obesity among children and adolescents. In the US and globally, childhood overweight (BMI $\geq 95^{\text{th}}$) prevalence increased significantly across all races, ethnicities and both genders. Increasing childhood BMI is associated with rise in childhood blood pressure (BP).

The 2004 "Fourth Report" on Childhood HTN created new BP standards based on height percentiles as well as age and gender. It provides a rationale for early identification, evaluation and treatment of children with elevated BP, and makes therapeutic recommendations.

Based on the "Fourth Report", newer definitions were termed including: White-coat hypertension (WCH), masked HTN, pre-hypertension and hypertension stages 1 & 2.

Ambulatory blood pressure monitoring (ABPM) is the most reliable way of evaluating BP during a 24-hour period of the patient's normal daily activities. Patients wear a lightweight BP monitor which measures BP at regular intervals for 24 hours. The readings are recorded by the monitor and later downloaded to the interpreter's personal computer. Equipment for ABPM is available for use in children over 5 years of age, and the validity of ABPM has been confirmed in children. It is a powerful tool for the investigation of children and adolescents with suspected or known HTN, with the potential to streamline the evaluation of children with elevated BP. Since hypertension in the pediatric population has been shown to be associated with target organ damage, it is important to diagnose, evaluate and treat hypertension early and effectively.

Biography

Ora Yadin received her M.D. from the Hebrew University and Hadassah Medical School in Jerusalem, Israel. She completed a residency in Pediatrics at the Soroka Medical Center at the Ben-Gurion University in Beer Sheva, Israel, and a Fellowship in Pediatric Nephrology at UCLA. She has been on the faculty of the Pediatric Nephrology Division at the David Geffen School of Medicine at UCLA since 1991. She runs the general pediatric nephrology clinics, consults at outreach hospitals, and is the Co-Director of the Pediatric Nephrology Fellowship Training Program at UCLA. She is involved in clinical research and is the PI on several studies. She is a member of several societies: the International Society of Nephrology, International Pediatric Nephrology Association, National Kidney Foundation, American Society of Nephrology, The Western Society for Pediatric Research and The Western Society for Pediatric Nephrology. She is a reviewer in the following journals: Pediatric Transplantation, Clinical Nephrology, and Pediatric Nephrology.

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