Twenty-Four Hour Ambulatory Blood Pressure Monitoring in Adolescents with Type 1 Diabetes: Getting Started

Margaret Pellizzari, R.N., Phyllis W. Speiser, M.D., Dennis E. Carey, M.D., Pavel Fort, M.D., Paula M. Kreitzer, M.D., and Graeme R. Frank, M.D.

Abstract

Twenty-four hour ambulatory blood pressure monitoring (ABPM) is a valuable tool in the pediatric and adolescent population with type 1 diabetes. It provides useful information not readily available from sporadic clinic blood pressure (BP) measurements and a more reliable estimation of the subject's BP over an extended period of time. Ambulatory blood pressure monitoring is gaining popularity with clinicians and investigators alike. The American Heart Association has recently issued recommendations for the use of ABPM in children and adolescents. We have incorporated ABPM into our adolescent diabetes practice and present useful information for clinicians planning to initiate 24 h ABPM in their clinical practice.


Author Affiliation: Division of Pediatric Endocrinology, Schneider Children's Hospital, North-Shore Long Island Health System, New Hyde Park, New York

Abbreviations: (ABPM) ambulatory blood pressure monitoring, (BP) blood pressure, (DBP) diastolic blood pressure, (MAP) mean arterial pressure, (SBP) systolic blood pressure

Keywords: ambulatory hypertension, blood pressure monitoring, diabetes complications, type 1 diabetes mellitus

Corresponding Author: Margaret Pellizzari, R.N., Division of Pediatric Endocrinology, Schneider Children's Hospital, 400 Lakeville Road, Suite 180, New Hyde Park, NY 11042; email address mpellizz@lij.edu