The etiology and clinical analysis of 232 hospitalized children with hypertension.

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Objectives: To analyze the etiology and clinical characteristics of hypertension in children; To analyze the risk factors of primary hypertension with target organ damage.

Methods: We retrospectively analyzed 232 hospitalized children with hypertension in Children’s Hospital Institute of Pediatrics between April 2013 to December 2017.

Results: 1) A total of 232 eligible cases, which consisted of 183 males (79%) and 48 females (21%). Among these children: 38 cases (16%), 126 cases (54%), and 68 cases (29%) were diagnosed as prehypertension, hypertension in stage I, and hypertension in stage II, respectively; 2) The etiological composition of hypertension: There are 181 cases (78%) diagnosed as primary hypertension and 51 cases (22%) diagnosed as secondary hypertension, respectively; The proportion of the primary hypertension children in the period of preschool, school-age, and adolescent was 1.6%, 21% and 77.4%, respectively. The etiology of secondary hypertension mostly are the renal parenchymal hypertension and renal vascular hypertension (43.1%). 3) The clinical manifestations of primary hypertension are mostly asymptomatic or mild symptoms, totally 148 cases (64%); 4) The high risk factors of primary hypertension with target-organ damage including cesarean section, glucose metabolism disturbance and BMI>24kg/m².

Conclusions: In recent years, the proportion of primary hypertension among hospitalized children has increased. It is of great significance to make blood pressure monitoring as a routine physical examination for primary and middle school students, so as to detect hypertension in children earlier, then make active intervention and improve the prognosis of hypertension in children.