Study: Children with hypertension at higher long-term risk for serious heart conditions

May 3 2024

Credit: Unsplash/CC0 Public Domain
Youth with high blood pressure are nearly four times more likely to be at long-term risk of serious heart conditions including stroke and heart attack, according to a new study. The research, led by McMaster University, will be presented at the Pediatric Academic Societies (PAS) 2024 Meeting, held May 2–6 in Toronto.

Hypertension affects one of every 15 children and adolescents worldwide and is a growing concern, according to researchers. Despite this, it is unclear what happens to these children in the long-term. Researchers compared 25,605 youth diagnosed with hypertension from 1996–2021 in Ontario to peers without the condition.

The study found that during average follow-up of 13 years, youth with hypertension were at two to four times higher risk of experiencing heart attack, stroke, heart failure, or cardiac surgery compared to youth without hypertension. Experts say that improved blood pressure screening and treatment during childhood may reduce the risk of serious cardiovascular disease as an adult.

"Devoting more resources to pediatric blood pressure screening and control could lower the risks of long-term heart conditions in children with hypertension," said Cal H. Robinson, MD, pediatric nephrology fellow at The Hospital for Sick Children (SickKids) and presenting author.

"More awareness about the importance of regular screening and follow-up for pediatric hypertension may prevent children from developing significant adverse heart outcomes later in life."

Study authors recommend additional funding for long-term pediatric hypertension studies to provide greater insight into adult heart and
kidney outcomes in children with hypertension.

**More information:** Abstract: Long-term cardiovascular outcomes in children and adolescents with hypertension: A population-based, propensity-matched cohort study

Provided by American Pediatric Society


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.