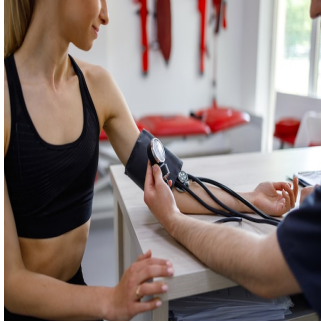


Young Athletes at Risk for Hypertension



A study presented at the American College of Cardiology's Care of the Athletic Heart conference shows that a substantial portion of young athletes are at risk for hypertension.

Hypertension, or high blood pressure, affects 47% of adults in the U.S. Over time, this condition can weaken the heart, blood vessels, and kidneys, leading to the risk of stroke or heart attack. Often called the "silent killer," hypertension is a major risk factor for heart disease and early death.

The 2017 ACC/American Heart Association Guideline redefined the classifications of pre-hypertension (pre-HTN), Stage I hypertension (HTN), and Stage II HTN. However, limited data on how these updated classifications impact young athletes is available.

This study used data from preventive heart screenings to assess the prevalence of hypertension among young athletes and evaluate the effect of the 2017 ACC/AHA guidelines on diagnosis rates.

Among the 1,429 participants screened, 1,196 had recorded blood pressure measurements. The cohort included 717 male (59.9%), 477 female (39.9%), and two gender non-binary (0.2%) participants, ranging in age from 10 to 31 years, with a median age of 15 years. The blood pressure recordings revealed that 21.3% of the participants met the criteria for pre-HTN, 13.2% had Stage I HTN, and 8% were diagnosed with Stage II HTN. Male participants had a higher prevalence of Stage I HTN (17.3%) and Stage II HTN (10.9%) than female participants, who had prevalences of 7.1% and 3.8%, respectively. Young athletes participating in multiple sports had the highest rates of HTN at 28.3%, followed by basketball at 27.6% and football at 27.1%.

The findings indicate a significant prevalence of elevated blood pressure measurements among young athletes during heart screenings. The researchers noted that confirmatory testing in a controlled environment is essential to ensure an accurate diagnosis.

Several factors may explain the higher rates of HTN among athletes in specific sports, such as individualised training routines, dietary habits, variations in average body size, and social determinants of health. Previous studies have also found that sports involving higher levels of static exercise are associated with elevated blood pressure measurements. Football and basketball, which involve moderate levels of static exercise, could contribute to the higher HTN rates observed.

These findings highlight the importance of recognising and addressing elevated blood pressure in young athletes. Despite being perceived as a generally healthy population, young athletes are not immune to heart disease, including elevated blood pressure. The findings emphasise that screening for hypertension should be a routine part of sports physicals and that confirmatory testing is needed for accurate diagnosis.

Once hypertension is confirmed, educating young athletes and their families about the diagnosis becomes paramount. Appropriate lifestyle interventions, including dietary adjustments, counselling on supplement use, increased physical activity, healthy sleep behaviour, and stress management should be implemented along with routine monitoring.

The researchers concluded that appropriate lifestyle modifications could significantly impact blood pressure among young athletes, and early

detection is crucial for preventing long-term health complications.

Source: [American College of Cardiology](#)

Image Credit: iStock

Published on : Fri, 7 Jun 2024