Prevalence of elevated blood pressure among first

grade students in elementary school in Taipei

廖建彰;吳麗竹;楊晨;蔡卓城

Chien-Chang Liao;Li-Chu Wu;Chen Yang;Cheuk-Sing Choy

摘要

本文報導台北國小一年級學童高血壓盛行率及其人體測量學的相關因子。方法 在 2007 年,我們利用台北縣五所國小一年級學生入學例行性身體檢查時,量測 身高、體重、頸圍、腰圍及血壓。結果 總共有 2,344 位合適的學童參與了這項 研究,高血壓的盛行率高達 19.0%。與女孩相較,男孩有較高的高血壓盛行率(22.1 vs 15.7%, P=0.0002。相較於參考組,頸圍過大(41.9% vs 17.5%, p<0.0001)或腰圍 過大(45.9% vs 17.4%, p<0.0001)的兒童,他們的高血壓盛行率較高。肥胖小孩高 血壓盛行率較體重正常小孩高(37.6% vs 15.8%, p<0.0001)。在多變項羅吉斯迴歸 中,男孩較女孩有較高的高血壓危險(OR=1.41, 95% CI=1.13-1.75)。腰圍過大兒 童的高血壓危險較腰圍正常兒童高(OR=1.99, 95% CI=1.18-3.37)。相較於體重正 常的小孩,肥胖小孩(OR=1.83, 95% CI=1.14-2.92)及體重過重小孩(OR=1.99, 95% CI=1.48-2.68)的高血壓危險較高。結論 本研究發現體重過重或肥胖與兒童高血 壓有關。建議應將血壓量測納入兒童例行性的身體檢查。

Abstract

Background/Purpose. To evaluate the prevalence of elevated blood pressure (BP) and the associated anthropometric factors among first-grade elementary school students in Taipei county. Methods. We measured height, weight, neck circumference (NC), waist circumference (WC), and blood pressure (BP) in 2344 first-grade children who were undergoing a regular health examination at 6 elementary schools in Taipei County in 2007. Results. The overall prevalence of elevated BP was 19.0%. The prevalence of elevated BP was significantly higher in boys (21.1%) than in girls (15.7%) (p=0.0002). Compared with the reference group, children with high NC (41.9% vs 17.5%, p<0.0001) or high WC (45.9% vs 17.4%, p<0.0001) had a higher prevalence of elevated BP. The prevalence of elevated BP was higher in obese children than in children with normal weight (37.6% vs 15.8%, p<0.0001). In the multivariate logistic regression, boys had a higher risk of elevated BP than girls (OR=1.41, 95% CI=1.13-1.75). The OR for elevated BP in children with high WC was higher than that in children with normal WC (OR=1.99, 95% CI=1.18-3.37). Obese children (OR=1.83, 95% CI=1.14-2.92)

and overweight children (OR=1.99, 95% CI=1.48-2.68) had a higher risk of elevated BP than children with normal weight. Conclusion. This study found that overweight and obesity are associated with elevated BP. We suggest that BP measurements should be included in regular health examinations among children.