ABSTRACT

**Background** Nowadays, hypertension is an important public health problem. Classified as one of metabolic disease, hypertension can occur due to increase of adipose tissue mediated by sedentary behavior such as watching television. 

**Objective.** To assess the length of time and activities while watching television as a risk factor for hypertension in obese children.

**Methods** We conducted a case-control study in November 2013. Obese children aged 6 to 12 years old were assessed for blood pressure and questionnaire which contain activities and the length of time watching television. Food assessment include amount of calories and fat. High calories defined as consumption more than 1200, 1400, 1600 1800 kcal per day (respectively in girls, boys aged 4 to 8 years and 9 to 13 years. High fat defined as consumption more than 35% of total calories per day.

**Results** We enrolled 138 children in the study including 70 (51.4%) in hypertension group and 68 (49.2%) in normal group. The length of time watching television more than 2 hours per day was not significant as a risk factor for hypertension in obese children (P= 0.413, OR= 0.61, 95% CI 0.19-1.98). Consumption of high calory and high fat food was significant as a risk factor for hypertension in obese children (P=0.025, OR=4.31, 95% CI 1.14-16.2)

**Conclusion** The length of time watching television had no effect on the risk of hypertension in obese children, but high calories and high fat food consumption play role as a risk factor for hypertension in this study.

**Keywords:** watching television, hypertension, obese children