第 48 回日本循環器病予防学会　一般演題　抄録フォーマット

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➤ YIA の応募の有無　（〇をつけてください）　　[〇] 1. 応募する　　[ ] 2. 応募しない

◇YIA 応募条件についてはこちら　⇒　http://www.jacd.info/2012-jacd/endai/index.htm

抄録作成の前に・・・次頁の注意事項を必ずご一読下さい

	Association between high sensitivity C-reactive protein and incidence of type-2 diabetes mellitus in Japanese male and female workers

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Background: Elevated high sensitivity C-reactive protein (hs-CRP), a marker of low-grade systemic inflammation, may be involved in the etiology of type 2 diabetes mellitus (T2DM). However, whether inflammation precedes development of T2DM independently of cigarette smoking and obesity needs to be confirmed.

Method: We studied 4,213 civil servants in Aichi prefecture aged 35 to 66 at baseline in 2002, who donated blood samples. A total of 1,173 subjects were excluded due to following reasons: hs-CRP value 10 mg/L or higher (n = 25), with history of diabetes (n = 452) or missing values (n = 696). Hazard ratios of T2DM according to the hs-CRP quartiles (Q1: 0.02-0.18 (ref.), Q2: 0.18-0.33, Q3: 0.33-0.67, Q4: 0.67-9.62), were estimated by Cox proportional hazards model adjusted for gender, age, body mass index (BMI), alcohol intake, smoking status (current, past, never), the number of cigarette per day, physical activity, family history of diabetes (Model 1), and variables in Model 1+glucose (Model 2). The analysis was stratified by the presence of obesity (BMI 25 kg/m^2 or greater) in non-smokers.

Results: The mean (standard deviation, SD) age of subjects was 47.7 (7.2) years old. The numbers (%) of men, pre- and post-menopausal women were 2,346 (77.2%), and 494 (16.2%) and 200 (6.6%), respectively. The mean (SD) BMI was 22.8 (2.7) kg/m^2. The geometric mean (95% confidence interval, CI) of hs-CRP was 0.36 mg/L (0.34-0.37). During the 5-year follow-up, 156 new T2DM cases developed. In total sample, Model 2 HRs (CIs) for hs-CRP quartiles Q2, Q3, Q4 compared to Q1 were 0.67 (0.37-1.22), 1.43 (0.88-2.32), and 1.68 (1.03-2.73), respectively (p for trend = 0.003). Stratified analysis revealed that statistically significant association was observed only in normal weight non-smokers with Model 2 HRs (CIs) being 0.79 (0.29-2.17), 2.63 (1.25-5.56), 3.19 (1.49-6.86) for Q2 to Q4 compared to Q1, respectively (p for trend = 0.0006). The relationship did not change materially after adjusting for log-HOMA-IR.

Conclusion: This finding implied that higher hs-CRP itself or existence of chronic systemic inflammation precedes T2DM incidence independent of obesity or smoking.

（163mm×109mm）

A4 サイズ　天地マージン　20mm　左右マージン　25mm
以下、事務局使用項

受領日時：　　　　　　月　　日	受領 No.