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Poster presentations

PP-002 ASSOCIATION OF C-REACTIVE PROTEIN WITH METABOLIC SYNDROME AND DEPRESSIVE SYMPTOMS IN THE ENGLISH LONGITUDINAL STUDY OF AGEING

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Introduction The metabolic syndrome is a cluster of risk factors comprised of elevated fasting plasma glucose and insulin

resistance, central obesity, low levels of high-density lipoprotein cholesterol, hypertriglyceridemia, and hypertension. Depression is a common co-morbidity in individuals with metabolic syndrome. Inflammatory mechanisms have been suggested to be involved in depression and metabolic syndrome. C-reactive protein (CRP), an acute-phase reactant of systemic inflammation, has been found to be independently associated with metabolic syndrome and depression.

Objectives To assess the association between C-reactive protein with metabolic syndrome and depressive symptoms in a representative sample of British people aged 50 years and above.

Methods Participants were 8398 men and women from the English Longitudinal Study of Ageing(ELSA), a prospective study of community-dwelling older adults. Associations between CRP with metabolic syndrome and depressive symptoms were examined using stratified multivariate logistic regression adjusted for age, smoking, physical activity, and alcohol consumption. Metabolic syndrome was based on the new worldwide definition by the International Diabetes Federation (IDF). Elevated depressive symptoms was based on a score >=4 using the 8-item Center for Epidemiologic Studies Depression Scale (CES-D) scale.

Results The prevalence of having both metabolic syndrome and elevated depressive symptom was 27.5%. Preliminary results indicate that high CRP levels is associated with elevated depressive symptoms in individuals without metabolic syndrome (adjusted OR: 2.23, 95% CI: 1.65-3.02), but not in individuals with metabolic syndrome. High CRP levels is associated with metabolic syndrome in individuals with elevated depressive symptoms (adjusted OR: 3.41, 95% CI: 2.48-4.69) as well as in individuals without elevated depressive symptoms (adjusted OR: 3.46, 95% CI: 2.37-5.05).

Conclusions Metabolic syndrome and depressive symptoms are independently related to CRP. A better understanding using longitudinal data will help assess whether inflammation is a determinant of depressive symptoms in individuals with metabolic syndrome.

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