

中文題目：腹部脂肪組織的 Adiponectin 低是冠狀動脈疾病患者之一較具決定性的危險因子
英文題目：Low Adiponectin in Abdominal Adipose Tissue is a more determinative risk factor in
Patients with Coronary Artery Disease

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Background : Epicardial and abdominal adipose tissues(ATs) have recently been demonstrated to play inflammatory roles in coronary atherosclerosis. The aim of the study is to clarify which factor in circulation or ATs is the more determinative risk factor among proinflammatory mediators and adipocytokines in patients with coronary artery diseases(CAD).

Materials and Methods: Samples of abdominal and epicardial ATs were harvested in 46 patients with CAD who underwent coronary artery bypass surgery and in 12 non-CAD control subjects who underwent other types of open-heart surgery. Tissue and circulating levels of adipocytokines (adiponectin, leptin and visfatin) and proinflammatory mediators (tumor necrosis factors- α (TNF- α) and interleukin-6 (IL-6) were determined by ELISA.

Results: In multivariate regression analysis, adiponectin in abdominal AT (beta = -0.472, P <0.001) is the most powerful independent risk factor for CAD followed by IL-6 (beta = 0.215, P=0.001) and adiponectin (beta = -0.103, P = 0.007) in epicardial AT and, finally, the circulating IL-6 (beta = 0.228, P = 0.008) after adjustment for age, circulating adiponectin, TNF- α , visfatin and leptin; IL-6, TNF- α , visfatin, and leptin in abdominal ATs; and TNF- α , visfatin, and leptin in epicardial ATs. In terms of circulation, IL-6 (beta = 0.701, P <0.001) is the most powerful independent risk factor for CAD followed by TNF- α (beta = 0.294, P=0.003) after adjustment for age, circulating adiponectin, visfatin, and leptin.

Conclusion: Low adiponectin in abdominal AT is the most determinative risk factor for CAD among those proinflammatory mediators and adipocytokines.