

Effect of coronary reperfusion therapy on inflammatory markers, adiponectin and insulin resistance in ischemic diabetic patients

Thesis

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Summary

Adiponectin, a hormone derived from the adipose tissue, is considered an insulin sensitizer and it upholds both anti-atherogenic and anti-inflammatory effect (*Kadowaki et al., 2006*), while hs-CRP has been endorsed by multiple guidelines as a biomarker of atherosclerotic cardiovascular disease risk (*Goff et al., 2014*). Insulin resistance and IR-associated dysfunction of lipid metabolism can promote systemic and local inflammatory responses which participates in the development of CVD (*McFarlane et al., 2001*).

The present study aimed to determine the changes in adiponectin level, high sensitive C-reactive protein (hsCRP) in patients who underwent percutaneous coronary interventions (PCI) and surgical CABG for coronary artery disease (CAD) and compare the effect of both revascularization procedures on these parameters in diabetic and non diabetic ischemic patients after one month. This study investigated whether or not there was a relation between their levels and insulin resistance.

Adiponectin, hs-CRP and insulin levels were estimated in 40 patients with ischemic heart disease divided into diabetic and non diabetic diagnosed by coronary angiography, suggesting the procedure of reperfusion therapy and reevaluated 1 month after intervention by either PCI or CABG.

hs-CRP level is significantly lower in ischemic patients after revascularization by PCI in comparison to CABG group either diabetic or non diabetic.

hsCRP & Insulin and Adiponectin level decreased significantly in non diabetic ischemic patients after PCI with p-value <0.05 while hsCRP

only decreased significantly in diabetic ischemic patients after PCI. There is significant decrease in hsCRP after revascularization by PCI in any ischemic patient either diabetic or not.

hs-CRP level was significantly lower among ischemic patients after revascularization by PCI in comparison to patients needed CABG either diabetic or non diabetic as there was significant decrease in hs CRP after PCI when interpreting these results we can consider PCI causes less reperfusion injury compared to CABG procedure depending on hs CRP as predictor of reperfusion injury after revascularization by PCI in non diabetic ischemic patients.