**Impact of Anaemia on Development of Contrast-Induced Acute Kidney Injury AKI After Percutaneous Coronary Interventions**

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**Objective**
The aim of the present study was to assess the influence of anaemia on development of contrast-induced acute kidney injury (AKI) after percutaneous coronary intervention.

**Methods**
The subject group consisted of 1026 patients who had undergone coronary intervention procedure between January 1, 2008 and October 31, 2009. A nonionic, low osmolality contrast agent was used in our laboratory at this time. Serum creatinine values were measured before and within 48 h of administration of contrast agents. Contrast-induced nephropathy was defined as an increase of ≥0.5 mg/dl or ≥3% in serum creatinine concentration over baseline within 48 h of angiography. Anaemia as haemoglobin (Hgb) <120 g/l in women and <130 g/l in men.

**Results**
Among the 1026 patients studied, 32 (3.1%) experienced AKI after procedure. AKI occurred in 6.5% of the anaemic patients and 2.2% of the non-anaemic patients (p <0.05). Multivariate logistic regression analysis found that baseline creatinine clearance and baseline haemoglobin were independent predictors of AKI. When presence of anaemia was introduced into the multivariate model instead of baseline haemoglobin, it was also showed a significant association with AKI.

**Conclusion**
Anaemia increases the incidence of AKI in patients with moderate renal dysfunction. Patients with both preexisting renal insufficiency and anaemia are at high risk of AKI. Baseline creatinine clearance and baseline haemoglobin (or anaemia) are independent predictors of AKI.

**Observation the Change of Neutrophil Gelatinase-Associated Lipocalin Levels in Patients Undergoing Coronary Angiography and Percutaneous Coronary Intervention**

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**Objective**
To observe the level of neutrophil gelatinase-associated lipocalin (NGAL) in patients undergoing coronary angiography (CAG) and/or percutaneous coronary intervention (PCI) procedure before and after operation and to explore NGAL value in predicting of contrast-induced acute renal injury (CI-AKI).

**Methods**
60 patients undergoing CAG and/or PCI were enrolled in this study. Serum creatinine (Scr) and urinary NGAL were detected at different time points before and after operation.

**Results**
Of 60 patients, the change of the Scr level were not statistically significant (p>0.05), there were no case of CI-AKI. The level of urine NGAL at 6, 12, 24 h after operation was significantly increased compared with baseline (p<0.05).

**Conclusion**
Urinary NGAL has been significantly increased after coronary intervention therapy without the change of Scr levels. Urinary NGAL might be an early biomarker of prediction CI-AKI better than Scr.

**Obesity is Associated with Increased Nontarget Lesion Revascularization After Percutaneous Coronary Intervention with Drug-Eluting Stents**

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**Background**
Obesity is a major risk factor for developing coronary artery disease. It is less clear whether obesity accelerates progression of disease among those with established coronary disease.

**Objective**
To evaluate the effect of obesity on repeat revascularization for target and nontarget lesions in patients undergoing percutaneous coronary intervention (PCI) with drug-eluting stents (DES).

**Methods**
We studied 4,972 patients between January 2004 and December 2006. Patients were divided into three groups according to body mass index (BMI): normal (BMI 30 kg/m², n = 1, 213). Median follow-up was 26 (IR 20–53) months.

**Results**
There was no significant difference in the cumulative incidence of target lesion revascularisation (TLR) among normal-weight, overweight and obese patients (6.8% vs 5.4% vs 6.3%; p=0.186). In contrast, the incidence of nontarget lesion revascularisation (nonTLR) was significantly higher in obese patients compared with normal-weight and overweight populations (5.6% vs 5.9% vs 5.7%; p=0.001). Multivariate analysis showed that obesity was independently associated with a higher risk of nonTLR in patients without statins treatment (HR 1.55; 95% CI 1.03 to 2.28; p=0.057), but not in patients with concomitant statins treatment (HR 1.29; 95% CI 0.82 to 2.08; p=0.263).

**Conclusions**
Among patients undergoing PCI with DES, obesity was not associated with TLR, but was associated with a higher risk of nonTLR. Statins use may attenuate this adverse effect of obesity on atherosclerotic progression.