#1963 - The effect of curcumin in prevention of contrast nephropathy following coronary angiography or angioplasty in CKD patients	
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Body	**Abstract** **Introduction**: Contrast-induced nephropathy (CIN) is the most common cause of iatrogenic acute kidney injury. It is happened more commonly in patients with underlying kidney diseases. It is appeared that the oxidative stress is the main mechanism of contrast nephropathy. Curcumin is suggested as an herbal antioxidant agent, so we decided to assess the effect of curcumin in preventing of this complication in patients with underlying chronic kidney disease (CKD) who need coronary angiography. **Methods & Materials:** Weconducted double blind, placebo-controlled clinical trial in 60 moderate to severe CKD patients who underwent coronary angiography or angioplasty. Adjusted dose of Iodixanol was used as contrast agent in all of them.

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Curcumin or placebo administered orally, 1.5 g daily from 2 days before procedure to 3 days after it. CIN was defined by an increased serum creatinine level≥0.3mg/dl or an increase to ≥1.5 times of the baseline within 48 hours after procedure. Urinary NGAL test was also done the next day after angiography.

Results:

CIN occurred in 12(20%) of patients, 5(16.7%) in Curcumin group and 7(23.3%) in placebo group (odds ratio [OR], 0.56; 95% confidence interval [CI], 0.18 to 2.36; P0.51). Serum Creatinine was increased after72 hours of intervention from 1.65±0.26 mg/dl to 1.79±0.33 mg/dl in Curcumin group and from 1.61±0.23 mg/dl to 1.86±0.35 in placebo group. There is no significant difference between the mean increase in serum creatinine concentration in the placebo group and Curcumin group (difference of 0.006 mg/dL; 95% CI, - 0.06 to 0.08; P0.85). Urinary NGAL test was significantly higher in patients with AKI (p=0.000), but there weren't differences in its level in two groups (p=0.761)

C**onclusion**:

It is appeared prophylactic oral Curcumin hasn't protective effects on CIN in high risk patients who have undergone coronary procedure.

Keywords: Acute Renal injury, Curcumin, contrast Nephropathy

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