

Can do inflammatory markers predict restenosis after drug eluting stent implantation?

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Background and Purpose : Inflammatory markers including high sensitivity C-reactive protein (hs-CRP) was already known as predictive risk factor for coronary artery disease. We investigated whether measurement of inflammatory markers predicted the in-stent restenosis (ISR) after drug eluting stent (DES) implantation in patient with chronic stable or unstable angina. **Methods :** We examined serial white blood cell, monocytes, lymphocyte count and serum hs-CRP level in 76 patients (age: 60.3 ±8.3 years, male: n=41, stable angina: n=55) underwent successful DES implantation. Blood samples were taken before and after procedure and then, at 6 months. We analyzed angiographic ISR at 6 months. **Results :** At 6 months, follow up angiography was obtained in all patient and ISR was confirmed in 7 lesions (9.2%, stable angina: n=5). Value of four markers on pre- and post-procedure didn't have significant differences between patients without ISR and with ISR. Also, value at 6 months had no correlation with ISR. We could not show significance of hs-CRP values on preprocedure when examined in following ranges: less than 0.1 mg/dl, 0.1 to 0.3 mg/dl, and greater than 0.3 mg/dl, proposed to indicate low, average, high risk (Table. 1). **Conclusion :** Our study showed that Periprocedural inflammatory marker could not predict ISR after stent implantation at least in the stable or unstable patient in DES era. Table. 1 Significancy of CRP values on preprocedure.

	preprocedure value of CRP (mg/dl)			total	p value
	≤0.1	0.1-0.3	≥0.3		
ISR (-)	25	16	23	64	0.910
ISR (+)	3(10.7%)	1(5.88%)	3(11.5%)	7	
total					
28					
17					
26					
71					

Clinical Predictors of Complete ST Segment Resolution after Primary Percutaneous Coronary Intervention

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Background : The failure of ST-segment resolution(STR) after primary percutaneous coronary intervention (pPCI) was associated with adverse clinical outcomes. However, the clinical predictors for complete STR on admission were little known. **Methods :** Patients undergoing pPCI (n=90, male 69, mean age 60.3 years) were divided into group I (complete STR with ≥70%, n=50) and group II (incomplete STR with <70%, n=40), and were compared based on clinical factors including electrocardiogram(ECG), angiographic feature and laboratory data. **Results :** No difference was observed in both groups in terms of age, gender, presence of preinfarction angina, risk factors, previous medication, previous myocardial infarction, blood pressure, heart rate, door to balloon time and symptom to balloon time. Initial troponin I and CK-MB levels were higher in group II. Grade 3 ischemia ECG on admission were more frequently found in group II than group I (n=32, 80% vs n=30, 60%, p=0.034). In addition, Group II had more anterior infarction than group I (n=28 vs n=18, p=0.001). TMP gradings before pPCI in group II were worse than that of group I (p=0.005) but TMP gradings after pPCI did not significantly differ in both groups. Logistic regression analysis demonstrated that anterior infarction and initial TMP grade were significant predictors for complete STR (p<0.0001 and p=0.03). **Conclusions :** This study suggests that lower TMP grade before pPCI and anterior infraction are independent predictors of failure to achieve complete STR.