— 45 —

The Effect of Intracoronary Bolus Dose of Abciximab Administration in Patients with Acute ST-Segment Elevation Myocardial Infarction

The Cardiovascular Center of Korea University Anam Hospital, Seoul1, Korea, The Heart Center of Chonnam National University Hospital, Chonnam National University Research Institute of Medical Sciences, Gwangju[2]

*임상엽[1] · 정명호[2] · 문재연[2] · 홍영준[2] · 김주한[2] · 안영근[2] · 강정채[2]

Background : The aim of this study is to carify the effect of intracoronary (IC) administration of a bolus dose of abciximab during percutaneous coronary intervention (PCI) in the patient with acute ST segment elevation myocardial infarction(ASTEMI). **Methods :** We studied 42 patients with ASTEMI who underwent primary PCI on the targetvessel after administration of an IC abciximab bolus (0.25 mg/kg) prior to balloon inflation (IC Group), and 44 control patients who were treated by intravenous (IV) abciximab (IV Group). In-hospital major adverse cardiac event (MACE; death, myocardial infarction, urgent revascularization) and corrected TIMI frame count (CTFC) was assessed. CTFC was assessed before abciximab treatment and the end of PCI. **Results :** There were no differences between the groups with regard to baseline clinical, and angiographic characteristics and the success rate of intervention. After administration of abciximab, CTFC significantly decreased from 48.6±37.4 to 20.1±18.5 in the culprit vessel of IC group, while 49.8±42.6 to 28.9±31 in the IV group (P=0.02). The incidence of in-hospital MACE was not significantly different between the two groups. The incidence of bleeding complication showed a trend toward reduction in IC Group (4.8%) compared with IV Group (6.8%). **Conclusions :** The IC administration of abciximab bolus acutely decreases CTFC through culprit vessels of patients with ASTEMI undergoing primary PCI. Further large scale studies are warranted to evaluate the potential clinical benefits associated with IC abciximab administration.

— 46 —

관상동맥 중재술을 받은 환자에서 변형 저밀도 지단백 콜레스테롤의 임상적 의의

전남대학교병원 심장센터, 전남대학교 의과학연구소

*윤남식 · 정명호 · 김영애 · 이우석 · 황선호 · 이상록 · 홍서나 · 김계훈 · 박형욱 · 김주한 · 안영근 · 조정관 · 박종춘 · 강정채

Background : It is well known that atherosclerosis is characterized by chronic inflammation of an injured intima and the pathological processes are initiated by accumulation of morphologically distinct, modified forms of low density lipoprotein (LDL)-cholesterol. However, it is not well known whether the level of modified LDL-cholesterol has clinical significance in patients who underwent percutaneous coronary intervention (PCI). **Subjects and Methods :** Eighty seven patients (63.0±11.1 years, 58 male) who underwent PCI were enrolled. Patients with stable or unstable angina pectoris were classified as group I (n=44, 62.4±9.3 years), and patients with acute myocardial infarction were classified as group II (n=43, 63.6±12.7 years). Modified LDL-cholesterol was expressed semiquantitatively by agarose gel electrophoresis using charge modification frequency (CMF). Clinical and coronary angiographic data were analyzed. **Results :** Clinical diagnosis was stable angina in 13, unstable angina in 31, non-ST elevation myocardial infarction in 5, and ST elevation myocardial infarction in 38 patients. There were no significant differences of CMF between two groups (3.0±7.9 vs. 2.1±10.9, p=0.671). Diameter stenosis was larger in patients with higher CMF (CMF≥10:CMF<10=84.0±10.4 %:78.6±13.7 %, p=0.047). Six-month MACE had no relationship with CMF in group I. However, in group II, six-month MACE developed more frequently in patients with higher CMF than 10 [2(28%) vs. 2(5%), p=0.031)]. Patients with acute myocardial infarction whose CMF was higher than 10, had in-stent restenosis on follow-up coronary angiography (p=0.003). **Conclusion :** The higher level of modified LDL cholesterol is associated with severe clinical and angiographic findings, and poor prognosis in patients with acute myocardial infarction.