ROLE OF INFLAMMATORY FACTORS IN THE PATHOLOGY OF ACUTE MYOCARDIAL INFARCTION
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Objective To observe the influence of simvastatin on plasma CD40L, MMP-9 and CRP level in patients of acute myocardial infarction within 1 week.

Methods Sixty one patients of acute myocardial infarction were randomly divided into three groups: simvastatin treatment one group (20 mg/day of simvastatin, n=21), simvastatin treatment two group (80 mg/day of simvastatin, n=23), regular treatment group (no lipid-lowering drugs, n=17). Plasma level of CD40L, MMP-9 and CRP before and after treatment 1 week were detected. At the same time, 35 cases of age matched healthy individuals were selected as a control.

Results Plasma level CD40L, MMP-9 and CRP before treatment in patients of acute myocardial infarction were significantly increased. Plasma level of CD40L, MMP-9 and CRP after treatment by simvastatin were significantly decreased. And plasma level of CD40L, MMP-9 and CRP after treatment by big dose simvastatin were more significantly decreased. Level of plasma lipid were not changed before and after treatment in three groups.

Conclusion Plaque disruption may be related to the increased plasma level of inflammatory factors. Simvastatin decreased
plasma level of inflammatory factors in the patients of acute myocardial infarction within the first 7 days, so it may benefit to atherosclerotic plaque stabilisation.