Effects of different dosages of pravastatin on blood lipids and serum cystatin C in patients with coronary heart disease

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the effects of different dosages of pravastatin on serum lipids and the serum cystatin C levels in patients with coronary heart disease. Methods: A total of 26 normal people were took as healthy control group, while 104 cases of coronary heart disease were took as the observation group. They were randomly divided into 4 groups: conventional treatment group; 10 mg/d, 20 mg/d, 40 mg/d of pravastatin treatment group (26 cases each). The conventional treatment group were given with low molecular heparin, clopidogrel, aspirin, nitrates, beta-blockers, angiotensin converting enzyme inhibitor for therapy, and the pravastatin treatment group received different dosages of pravastatin besides the conventional therapy. All patients were treated for 8 weeks. Before and after the treatment, levels of total cholesterol, triglyceride, low density lipoprotein, high density lipoprotein and serum cystatin C were tested. Results: Compared with normal healthy group, the levels of serum cystatin C were increased in patients with coronary heart disease (P=0.008); compared with these before the treatment, both 20 mg/d and 40 mg/d pravastatin can significantly improve cholesterol, triglyceride, low density lipoprotein, high density lipoprotein and serum cystatin C level (P<0.05). Conclusions: pravastatin can reduce the blood lipid levels by regulate the bold lipids and inhibit the reaction of inflammation of coronary artery. Both medium and high doses of pravastatin can lower lipid has anti-inflammatory function, which are worthy of clinical application in the treatment of coronary heart disease.

[KEY WORDS] Coronary heart disease; Pravastatin; Blood lipid; Serum cystatin C