RISK FACTORS OF CARDIAC TROPONIN T ELEVATION IN PATIENTS WITH STABLE CORONARY ARTERY DISEASE AFTER ELECTIVE CORONARY DRUG-ELUTING STENT IMPLANTATION

Objectives Cardiac troponin T elevation after coronary intervention has been demonstrated to be associated with the prognosis of coronary artery disease (CAD). However, there were few studies about comprehensive risk factors analysis of troponin T elevation after elective drug-eluting stent (DES) implantation.

Methods From March to December in 2010, patients with stable CAD were admitted for elective coronary intervention in our hospital. They were divided into elevated troponin T group and normal troponin T group by post-procedural troponin T. Clinical factors, laboratory-test factors and angiographic factors (such as gender, age, cholesterol, Gensini score and so on) were analysed.

Results A total of 209 patients with an average age of 64.0±9.9 years were enrolled in the study: 70 patients with elevated troponin T (≥0.03 ng/ml) after DES implantation and 139 patients with normal troponin T (<0.03 ng/ml). After univariate analysis, we found that age, hypertension, total cholesterol, LDL-C, Gensini score, number of stenosed vessels and number of implanted stents were associated with post-procedural troponin T elevation. According to the results of multivariate analysis, we found that age, total cholesterol, number of stenosed vessels and number of implanted stents were independent risk factors of post-procedural troponin T elevation.

Conclusions Age, serum total cholesterol, number of stenosed vessels and number of implanted stents could be independent risk factors of troponin T elevation after elective DES implantation.