

Anemia is a strong predictor of antiplatelet therapy discontinuation in patients with acute coronary syndrome

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Background: In patients with a drug-eluting stent for acute coronary syndrome (ACS), antiplatelet discontinuation is a serious problem because of high risk of stent thrombosis. However, there is no firm evidence for predictors of antiplatelet discontinuation. We explored a predictor of antiplatelet discontinuation from baseline characteristics. **Method:** Consecutive 161 ACS patients who underwent percutaneous coronary intervention from 2004 to 2008, were enrolled. **Results:** During 12 months follow up period, total 17 events (10.6%) that discontinued antiplatelet drugs (non-cardiac surgery, lethal bleeding or biopsy) were occurred. There is no association between antiplatelet discontinuation and sex, age, eGFR, hypertension smoking or diabetes, however, only anemia (hemoglobin < 12.0 g/dL) has a strong relationship (table & Figure). **Conclusion:** Anemia is a strong predictor of antiplatelet therapy discontinuation in patients with acute coronary syndrome. We should make a careful choice to use drug eluting stents in ACS patients with anemia.

Table

Association between baseline characteristics and antiplatelet therapy discontinuation

	Odds ratio	95% CI	P value
Age (years)	0.995	0.949-1.043	0.840
SEX	1.1019	0.321-3.240	0.975
Anemia (Hb <12 g/dl)	6.976	2.274-21.402	0.001
eGFR (mL/min/1.73m ²)	1.016	1.002-1.030	0.021
UA (mg/dl)	0.831	0.586-1.180	0.301
Hypertension	1.271	0.363-4.454	0.708
Diabetes	2.083	0.733-5.925	0.169
Smoking	1.292	0.436-3.823	0.644

※ odds ratio was adjusted by age, sex, anemia, UA, hypertension, diabetes and smoking.

Figure

Kaplan-Meier Curves for discontinue antiplatelet therapy

