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May 28, 2020

Associations of antithrombotic agent use with clinical outcomes in critically ill patients with troponin I elevation in the absence of acute coronary syndrome (Table 5)

PLOS One

Chuan-Tsai Tsai[1], Ya-Wen Lu[1], Ruey-Hsing Chou[1], Yi-Lin Tsai[1], Ming-Ren Kuo[1], Jiun-Yu Guo[1], Chi-Ting Lu[1], Chin-Sung Kuo[1], Po-Hsun Huang[1]

[1]National Yang Ming Medical College

1 Works for me dx.doi.org/10.17504/protocols.io.bfbmjik6

Chuan-Tsai Tsai

ABSTRACT

Introduction: To evaluate efficacy of antithrombotic agents in critically ill patients with elevated troponin I level during intensive care unit (ICU) admission.

Methods and results: It was a retrospective observational study which was conducted in a tertiary teaching hospital in Taipei, Taiwan. All patients hospitalized in ICU for >3 days and with available serum troponin I data from December 2015 to July 2017 were included. Patients with definite diagnosis of acute myocardial infarction (AMI) were excluded. We divided patients with troponin I elevation into three groups; no prescription, chronic prescription and new prescription of antithrombotic agents during ICU admission. We defined new prescription when patients were on antithrombotic agents, including antiplatelet agents, direct oral anticoagulants, and warfarin after troponin I was found to be elevated at ICU admission and chronic prescription, if antithrombotic agents were on medication list more than 30 days before ICU admission. Primary outcomes were 30-day and one-year all-cause mortality. Of 597 subjects who met inclusion criteria, 407 (68%) patients had elevated troponin I (>0.1 ng/mL) on ICU admission. These patients had increased 30-day [hazard ratio (HR), 1.679; 95% confidence interval (CI), 1.132–2.491; $p = 0.009$] and one-year (HR, 1.568; 95% CI, 1.180–2.083; $p = 0.002$) all-cause mortality compared with those without elevated troponin I. In patients with elevated troponin I, there was no significant difference of 30-day all-cause mortality among three groups ($p = 0.051$) whereas patients on chronic prescription showed significant survival benefit in one-year all-cause mortality when compared to those without or with new prescription ($p = 0.008$).

Conclusions: In critically ill patients, elevated troponin I in the absence of AMI was associated with poor prognosis. Newly prescribed antithrombotic agents in ICU didn't reveal the difference in short and long-term prognosis while chronic antithrombotic agent use was associated with better one-year survival rate, suggesting that these drugs play a protective role in this high-risk population.

EXTERNAL LINK

https://doi.org/10.1371/journal.pone.0233178

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Tsai C, Lu Y, Chou R, Tsai Y, Kuo M, Guo J, Lu C, Kuo C, Huang P (2020) Associations of antithrombotic agent use with clinical outcomes in critically ill patients with troponin I elevation in the absence of acute coronary syndrome. PLoS ONE 15(5): e0233178. doi: 10.1371/journal.pone.0233178

ATTACHMENTS

Table 5.docx

Citation: Chuan-Tsai Tsai, Ya-Wen Lu, Ruey-Hsing Chou, Yi-Lin Tsai, Ming-Ren Kuo, Jiun-Yu Guo, Chi-Ting Lu, Chin-Sung Kuo, Po-Hsun Huang (05/28/2020). Associations of antithrombotic agent use with clinical outcomes in critically ill patients with troponin I elevation in the absence of acute coronary syndrome (Table 5). https://dx.doi.org/10.17504/protocols.io.bfbmjik6