Successful management of life-threatening bleeding in a patient receiving streptokinase, dabigratan, and dual antiplatelet agents: A case report

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Introduction: Dabigratan was widely prescribed for preventing venous thromboembolism due to risk-benefit profile compared to warfarin but major bleeding events could occur. Idarucizumab, a specific antidote of dabigratan, was indicated in the management of patients with fatal bleeding.

Methods: Case report: We reported a case of a 60-year-old man taking dabigratan (150 mg BID) for non-valvular atrial fibrillation, who presented with typical chest pain and biventricular heart failure. ECG demonstrated significant ST elevation at lead V2-V4. He was diagnosed as anteroseptal wall STEMI with acute heart failure. Streptokinase was administered as a fibrinolytic therapy for reperfusion of STEMI, resulting in a life-threatening bleeding (massive upper gastrointestinal bleeding). Active upper gastrointestinal bleeding (UGIB) was concerned and treated with fresh frozen plasma (FFP) 1,800 ml (30 ml/kg), platelet concentration 18 units and packed red cell transfusion 1 unit. But UGIB was still active. Hematocrit dropped from 33% to 17%. Due to a life-threatening bleeding condition which could be caused from dabigratan, idarucizumab 5 mg was administered. PT and aPTT was repeated and showed normal. Thirty minutes later, hemodynamic improved with no further bleeding. No side effects were recorded after administration of idarucizumab and no thromboembolic complications were observed during admission. After obtaining written informed consent, the patient was sent to interventional center for elective percutaneous coronary intervention.

Result: Successful treatment of this serious adverse event with blood component and idarucizumab was reported.

Conclusion: Administering blood component and idarucizumab in dabigratan-treated STEMI patients after streptokinase administration with serious bleeding complications could be life-saving. Early diagnosis and prompt treatment should be emphasized considerably.