ABSTRACT

DRUG UTILIZATION STUDY OF ORAL ANTIPLATELET DRUGS IN PATIENTS WITH RECURRENT ISCHEMIC STROKE (Study at Dr. Soetomo Teaching Hospital Surabaya East Java)

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Background: One third of the strokes are recurrent attacks with ischemic stroke is the most frequent etiology (87%). Cumulative risk of stroke recurrent is about 20% at four years, with overall mortality rate of 38%. Antiplatelet therapy have an important role in the long-term prevention of ischemic stroke in patients who have experienced an acute ischemic stroke.

Objective: The aims of this study was to analyze the profile of oral antiplatelet drugs used in patient with recurrent ischemic stroke, and to identify drug related problems (DRPs) of oral antiplatelet drugs.

Method: It was a retrospective study during period 1 January 2014 to 31 December 2014 at Dr. Soetomo Teaching Hospital Surabaya East Java.

Result: Oral antiplatelet drugs that used in patients with recurrent ischemic stroke were aspirin, clopidogrel, and cilostazol. Oral antiplatelet monotherapy was used instead of oral antiplatelet combination. Aspirin was the most widely used antiplatelet monotherapy. The dose and frequency of administration of oral antiplatelet drugs in patients with recurrent ischemic stroke was appropriated based on guideline. Actual drug related problems were side effects on gastrointestinal bleeding (7%), dyspepsia (2%), and increased BUN and creatinine serum values (7%) due to used of aspirin. Potential drug related problems that can happened were interaction between oral antiplatelet drugs (clopidogrel and aspirin) with other drugs, namely clopidogrel with simvastatin (4%), clopidogrel with omeprazole (4%), clopidogrel with amlodipine (7%), aspirin with ACE inhibitors (13%) and aspirin with NSAIDs (7%).

Conclusion: Oral antiplatelet drugs used in patient with recurrent ischemic stroke were aspirin, clopidogrel, and cilostazol. The dose and frequency of administration of oral antiplatelet drugs in patients with recurrent ischemic stroke was appropriated based on guideline. Drug related problems were adverse drug reaction and antiplatelet interactions with other drugs.

Keywords: recurrent ischemic stroke, secondary stroke prevention, oral antiplatelet drugs, aspirin, clopidogrel, cilostazol, drug related problems