ABSTRACT DRUG UTILIZATION STUDY OF ORGANIC NITRATES GIVEN TO PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

(Study of Hospitalized Patients at Department Internal Medicine Rumkital Dr. Ramelan Surabaya)

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Organic nitrates are widely used in the management of coronary artery disease, including acute myocardial infarction (AMI) and these drugs are still amongst the most frequently prescribed and applied drugs worldwide. Organic nitrates are a group of very effective anti-ischemic drugs. The goal of organic nitrate therapy is vasodilatation that produces hemodynamic consequences that can be put to therapeutic use.

The aim of this study was to determine the pattern of drug utilization of organic nitrates in the treatment of AMI in Rumkital Dr. Ramelan Surabaya and identify problems related to drugs (DRP) of organic nitrates that may occur.

The study was conducted retrospectively by focusing on Patient Medical Record (PMR) gathered from hospitalized patients during the period April 2014 - April 2015. The results were compared with guideline management for AMI from journals and textbooks.

The results showed that of 34 patients who met the inclusion criteria, 28 (82%) were men and 6 (18%) were women, with half (50%) in the 51-60 years age range. There were 2 types of organic nitrates used in patients, ISDN (85%) and nitroglycerin (15%). The administration of ISDN intravenous pump gave 0.5m mg/h as initial dose then continued with ISDN oral 3x5 mg as maintenance dose was the most widely administered (32%), while DRP occurred at a rate of 7 from 34 patients having headache as the side effect. Drug related problem that potentially occurred, such as the interaction between organic nitrate and other vasodilators that cause hypotension.

Drug utilization study of organic nitrates at hospitalized patients with AMI in Rumkital Dr. Ramelan Surabaya carried out in accordance with guideline management for AMI from journals and textbooks.

Keywords: Drug utilization study, Acute myocardial infarction, Organic Nitrate