

ABSTRACT

DRUG UTILIZATION STUDY IN PATIENT WITH PULMONARY HYPERTENSION

(Study was conducted at Installation of Hospitalization of Department of Cardiology and Vascular Medicine, Dr. Soetomo General Hospital Surabaya)

Background-Pulmonary hypertension is characterized by elevated pulmonary arterial pressure can be either idiopathic or secondary. The prevalence of pulmonary hypertension based on the secondary disease, but it is widely known as a rare disease. Pulmonary hypertension is threatening life if the patient does not get a good health care.

Objective-The aim of this study was to identify the pattern of drug utilization in patient with pulmonary hypertension, drug related problems and compare with therapy guidelines of pulmonary hypertension.

Methods-The analysis was conducted descriptively by using patient's medical record (observational retrospective) who hospitalized during the period 1 June 2009 until 31 December 2010 in Installation of Hospitalization of Department of Cardiology and Vascular Medicine, Dr. Soetomo General Hospital Surabaya.

Results-Based on the data which was obtained from 20 patients, 65% of patients are suffered from pulmonary hypertension due to left heart disease. Pulmonary hypertension was dominated by female (80%). Prostanoid, especially beraprost is the most widely used treatment in pulmonary hypertension as a specific therapy to treat the causes (23.33%). Patient also used diuretics (58.9%) as supportive therapy to relieve the symptoms. The actual drug related problems which was found on this study are drug interaction and dosage too low. The problem of drug interaction was dominated by diuretics and other agents, while the problem of dosage too low appeared from the usage of sildenafil citrate, nifedipine, diltiazem, and furosemide.

Conclusion- The doses of pulmonary hypertension therapy in this study was not match with the guideline, especially for specific therapy such as PDE 5 inhibitor, prostanoid, and Calcium-channel blocker. The doses for those agents is lower than recommendation doses in guideline.

Keyword: drug utilization study, pulmonary hypertension