ABSTRACT

Drug Utilization Study In Outpatient with Chronic Kidney Disease Who are Undergoing Hemodialysis
(Study at Dr. Soetomo Hospital Surabaya)

This study aimed to identify and analyze the use of drugs in outpatient with CKD who are undergoing hemodialysis. Studies conducted prospectively from the April 1st to June 19th 2010 period on Hemodialysis Section in Dr. Soetomo Hospital, Surabaya. The results showed that from 61 patients with CKD who are undergoing hemodialysis, 50.82% were male and 49.18% were female with an age range of 21-59 years (88.52%). Three major etiologies of CKD were hypertension (59.02%), diabetes mellitus (27.87%), and kidney stones (16.39%). The complications of CKD were anemia (100.00%), hyperurisemia (72.13%), hyperphosphatemia (52.46%), hypertension (37.70%), hyperkalemia (27.87%), hypocalcaemia (22.95%), and cardiovascular disease (4.92%). From 46 patients who were received antihypertensive therapy, CCB is the most widely used for single therapy, whereas the widely used of combination therapy is the CCB-ACEI combination. The targeted blood pressure level 130/80 mmHg was reached by 10.87%. From 26 patients who were received allopurinol as antigout, only 7.69% who were succeeded to reach uric acid level at 6 mg/dL. There were 29 patients who received calcium carbonate as a phosphate binder, 41.38% has a solubility product (Ca x PO4) > 72 mg²/dL², that could get patients into calcifilaksis risk. There were 23 patients getting folic acid, PRC transfusion and iron supplements to treat anemia, all of them did not have near-normal Hb concentration. Antiulcer-antiemetics that were used was metoclopramide, ranitidine, omeprazole, and lansoprazole. Therapies to treat cardiovascular disease was isosorbide dinitrat. Drug Related Problem's (DRP's) that was found are the existence of adverse drug reactions, the need for additional therapy, unnecessary drug therapy, and compliance.

It is recommended for monitoring the use of drugs and review hypertension therapy in order to achieve the recommended target of therapy JNC VII.

Keywords: Hemodialysis, Chronic Kidney Disease, Outpatient, Complication, Drug Utilization Study