ABSTRACT

DRUG UTILIZATION STUDY OF CORTICOSTEROID IN PEDIATRIC PATIENT WITH NEPHROTIC SYNDROME
(Study at Department of Pediatric Inpatient Care Dr. Soetomo Teaching Hospital Surabaya)

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Nephrotic syndrome (NS) is diagnosed according to the criteria of the International Study of Kidney Disease in Children (ISKDC): proteinuria > 40 mg/m²/h, hypoalbuminemia < 2.5 g/dL, edema and hypercholesterolemia > 200 mg/dL. The cardinal manifestation of NS is massive proteinuria. The treatment of first choice in nephrotic syndrome is corticosteroid. The initial treatment for new-onset nephrotic syndrome generally includes 60 mg/m²/day (maximum 80 mg/d) of prednisone for 4 to 8 weeks, followed by 40 mg/m² every other day for 4 to 8 weeks, and then a gradual taper until it is discontinued. Corticosteroid have a lot of adverse drug reaction. Therefore, this study was needed.

The aims of this study was to analyze the profile of corticosteroid drug use in nephrotic syndrome, and to identify drug related problems (DRPs) of corticosteroid. It was a retrospective study during period January to December 2012 at Department of Pediatric Inpatient Care Dr. Soetomo Teaching Hospital Surabaya. The results showed that from 31 pediatric patients with nephrotic syndrome, and majority in the age of 5-18 y.o. The common symptoms that occured were palpebra edema, proteinuria and hypoalbuminemia. Main therapy in nephrotic syndrome was corticosteroid such as prednisone and methylprednisolone. Prednisone was administered orally at a dose 2 mg/kg body weight/day as a full dose therapy and at a dose 1,5 mg/kg body weight/day for alternating dose therapy. Drug related problem (DRP) that found in this study were fullmoon face, hypertension and drug interaction between corticosteroid and other drug.

Keywords: nephrotic syndrome, corticosteroid, paediatric patients, prednisone, methylprednisolone, drug related problems (DRPs).