

**ABSTRACT****DRUG UTILIZATION STUDY OF VITAMIN B<sub>1</sub>, B<sub>6</sub>, DAN B<sub>12</sub> IN  
GUILLAIN-BARRÉ SYNDROME PATIENTS  
(Study at Neurology Department of Dr. Soetomo General Hospital  
Surabaya)**

*Guillain-Barré Syndrome* (GBS) is an acute, immune-mediated demyelinating polyneuropathy of peripheral nervous system (PNS) characterized by acute or subacute symmetrical ascending motor weakness, areflexia, and mild to moderate sensory abnormalities. Vitamin B<sub>1</sub>, B<sub>6</sub>, B<sub>12</sub> therapy is not the primary therapy for GBS, but always used as a supportive therapy. This study was conducted to assess the use of vitamins B<sub>1</sub>, B<sub>6</sub> and B<sub>12</sub> to know the profile of the dosage form, dosage, route and frequency of administration in patients with GBS at Neurology Department of Dr. Soetomo General Hospital Surabaya. The retrospective observational method, medical records of 40 patients with GBS in any age admitted between January 1, 2012 and December 31, 2013 were reviewed. Patients medical history, clinical and laboratory data, drug utilization, disease progressivity, and therapy outcome were documented. The results were compared with literature. Fursultiamin given intravenously in a dose of 2x25 mg was the most widely used in the treatment of GBS. Thirty-five patients (87.5%) using this dose. Substitution route Alinamin F® (Fursultiamin) 2x25 mg intravenously - 2x25 mg orally was the most frequent substitution (12.5%). Metilcobalamin given intravenously in a dose of 1x500 mg in 24 patients was the most widely used (60%). Substitution dose intravenously metilcobalamin 2x500µg - 1x500µg was the most frequent substitution dose (7.5%). Fursulthiamine and methylcobalamine was the dominant neurotropic agents are used most widely in GBS patients during the study period and mostly showed positive outcomes. Vitamins B<sub>1</sub>, B<sub>6</sub>, and B<sub>12</sub> was the supportive therapy in cases of GBS that can help minimize or prevent the progression of the disease.

Keywords: drug utilization study, *Guillain-Barré syndrome* (GBS), vitamin B<sub>1</sub>, B<sub>6</sub>, dan B<sub>12</sub>