

**ABSTRACT****DRUG UTILIZATION STUDY OF ANTIBIOTICS IN BACTERIAL VENTRICULITIS PATIENTS****(Study was done at RSUD Dr. Soetomo Surabaya)**

Bacterial ventriculitis is inflammation of the ventricular drainage system due to bacterial infection of the cerebrospinal fluid which can cause morbidity and mortality in neurological patient. Antibiotics is used to treat infection, prevent drug related problem, and avoid bacterial resistant. The aim of this study was to identify antibiotics pattern used in bacterial ventriculitis in RSUD Dr. Soetomo Surabaya from January 1, 2014 until December 31, 2017. It was retrospective observational descriptive study using data from patient medication record.

The result showed that women had greater prevalence (62.86%) than men and were dominated by children age under 12 years old (60%). Hydrocephalus was the most common accompanying disease that found in 29 patients. Intravenous ceftriaxone was commonly used as monotherapy in 55.9% patients. Other antibiotics used as monotherapy were ampicillin, ampicillin-sulbactam, meropenem, amikacin, fosfomycin, levofloxacin, cefixime and cotrimoxazole. Combination of intravenous amikacin with intrathecal amikacin was used in 5 patients and intravenous ceftriaxone with intravenous metronidazole were given to 4 patients. Drug related problems found in antibiotics used in bacterial ventriculitis therapy including dose too low (8.16%) and dose too high (3.06%). The duration of the treatment were about 8-14 days in 28.57% of patient.

Concluded that antibiotics used in bacterial ventriculitis therapy were mostly agree with guideline and literature. Some drug related problem found need further evaluation to produce optimal clinical outcome. Prospective study needed to obtain more accurate data and to identify the effectivity of antibiotics use related to the outcome therapy.

**Keyword:** drug utilization, antibiotic, CNS infection, ventriculitis