

ABSTRACT

DRUG UTILIZATION STUDY OF ANTIBIOTICS ON BACTERIAL MENINGITIS (Study at Inpatient Instalation Department of Neurology Dr. Soetomo Hospital Surabaya)

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Background. Bacterial meningitis is an inflammation of the meninges (protective membranes) that surround the brain and spinal cord. Bacterial Meningitis mostly caused *Neisseria meningitidis*, *Streptococcus pneumoniae*, *Haemophilus influenza*.

Objective. To analyze the utilization of antibiotics on bacterial meningitis and identified drug related problems (DRPs) from bacterial meningitis treatment.

Method. This study was prospective observational study. The study was conducted in Dr. Soetomo Hospital Surabaya from March 1st, 2015 until June 31st, 2015. The data were obtained from patient record. The inclusive criteria were patient with diagnose of bacterial meningitis, used antibiotics, and stay in Inpatient Installation of Department of Neurology Dr. Soetomo Hospital Surabaya.

Result and Discussion. This study used 11 patient as subject. The result showed that bacterial meningitis was prevalent in male (55%) mostly in 15-29 years old (63.34) and the duration of therapy most between 7-14 days (45.45%). All bacterial meningitis patient were received ceftriaxone 2x2 gram intravenous (100%). Bacterial meningitis patient also given a combination antibiotic for other infections therapy, its ceftazidime, levofloxacin, gentamicin, cotrimoxazole. Ceftriaxone replaced into gentamicin (9.1%) which is adjusted with the culture of LCS patient. Gentamicin given 160 mg/day intravenous. Ceftriaxone also replaced into cefixime (9.1%) for patient treatment out of hospital. Cefixime given 2x100 mg orally. This study found the potential DRP in long-term gentamisin causing nephrotoxic and ototoxic.

Conclusion. Result of this study indicate that the use of antibiotics for bacterial meningitis is appropriate.

Keyword: Ceftriaxone, Antibiotics, Drug Utilization Study, Bacterial Meningitis