ABSTRACT

Drug Utilization Study (DUS) in Patient with Typhoid Fever Pediatric (Study At Pediatric Health Departement Dr. Soetomo Hospital Surabaya)

Typhoid fever is a systemic infection caused by Salmonella serotype enterika Typhi (S. typhi). This disease is a public health problem in tropical countries, including Indonesia. Groups of children aged 3-19 years has a high risk typhoid fever. Antibiotic treatment in patients who has typhoid fever will shorten the course of the disease, reduce complications and reduce mortality cases. In Indonesia, S. typhi sensitive to chloramphenicol, ampicillin, cotrimoxazole, ciprofloxacin and cephalosporins.

This study aims to examine the pattern of use of antibiotics given to patients with typhoid fever pediatric (including selection of choice: type, route, dose, frequency, and duration used antibiotics during hospitalization) that is associated with clinical features, laboratory test and microbiological test, analyze Drug Related Problems (DRPs) and outcome of therapy. The study was observational and retrospective descriptive analysis. The sample used included all the patients with typhoid fever pediatric who hospitalization during January 1st, 2008 until April 30th, 2010 (n = 130). Inclusion criteria included pediatric patients aged 1-14 years with a diagnosis of typhoid fever from January 1st, 2008 until April 30th 2010.

The results of this study were obtained the pattern of use of antibiotics include of single and switch over antibiotic. Single antibiotic therapy occurred in 71 patients (55%) with ceftriaxone given at most of 28 patients (22%). While the therapy of antibiotics of switch over occurred in 59 patients (45%) with chloramphenicol po administration at most of 8 patients (6%). Antibiotics are widely used is ceftriaxone (36%), chloramphenicol (35%) and ampicillin (25%). Duration of use of antibiotic therapy of single and switch over during of hospitalization respectively is 3-12 days and 1-8 days. Clinical feature that relevant is fever and gastrointestinal disorders (vomiting, and nausea, diarrhea, flatulence, hepatomegaly, typhoid tongue, obstipasi), test laboratories related are leukocyte values, Widal test, test Tubex. From a positive microbiological test of Salmonella typhi, all of antibiotics that used sensitive to Salmonella typhi. DRPs that happens is problematic drug side effects and drug interactions. Actual drug side effects occurred in patients with gastrointestinal problems that included nausea, vomiting, diarrhea and problems with plebitis each of 1%. Almost the entire gastrointestinal disorders under control, each amount 1% (vomiting, nausea, diarrhea, flatulence, typhoid tongue, obstipasi) and 12% (hepatomegaly) that have not been completed yet.