

ABSTRACT

Drug Utilization Study of Antibiotics in Pediatric Patient Urinary Tract Infection (Study at Pediatric Unit of Dr. Soetomo Teaching Hospital Surabaya)

KRISTANTI LESTARI

Urinary Tract Infection (UTI) is an infection caused by microorganism in urinary tract. UTI is the second most common cause infection after respiratory tract infection. *Escherichia coli* is one of the most common cause from gram negative bacteria in urinary tract. In recent years the gram negative bacteria cause multidrug resistant. Some antibiotics become resistant to cure UTI in child. The antibiotic utilization study in efficacy and safety were still no reports for children.

The purpose of this study analyze the utilization of antibiotics in pediatric patient with UTI including the type, dose, frequency and length of therapy also identify the adverse drug effect and potential interaction of antibiotics. This was retrospective studies from of 30 patients from January until December 2016 with descriptive analysis.

The results showed that patients were given empiric antibiotics such as ceftriaxon, co-trimoxazole, gentamicin, and amikacin. The definitive antibiotics were amikacin, gentamicin, meropenem, cefoperazone sulbactam, and amoxiclav. The dosage and length of therapy were appropriate for most of the antibiotics.

From the study, there was a patient has allergy to co-trimoxazole. Also, there were potential adverse drug of aminoglycoside that might cause nephrotoxicity and ototoxicity, co-trimoxazole could cause hypersensitivity rash for some patients, and meropenem could make diarrhea, inflammation on injection area, vomiting and nausea. So, it was closely monitored for its usage.

Keywords: antibiotic, drug utilization, pediatric, UTI, urinary tract infection