

INTISARI

Cefazolin merupakan antibiotik yang direkomendasikan sebagai antibiotik profilaksis pada tindakan bedah obstetri dan ginekologi oleh Kementerian Kesehatan dan Persatuan Obstetri dan Ginekologi Indonesia dibandingkan *ceftriaxone*. Tujuan dari penelitian ini adalah membandingkan luaran klinis dan keamanan penggunaan *cefazolin* dan *ceftriaxone* sebagai antibiotik profilaksis serta menentukan *cost-effective cefazolin* dan *ceftriaxone* pada pasien bedah obstetri dan ginekologi.

Pada penelitian dilakukan kajian analisis efektivitas biaya dari perspektif rumah sakit menggunakan rancangan penelitian uji acak tersamar ganda. Penelitian dilakukan pada bulan Januari - Juni 2020 di RSUD dr. Dradjat Prawiranegara Serang, dengan subyek pasien bedah obstetri dan ginekologi yang memenuhi kriteria inklusi dengan total 82 subyek. Subyek dibagi menjadi dua kelompok secara randomisasi blok, 41 subyek diberikan *cefazolin* dan 41 subyek diberikan *ceftriaxon*. Efektivitas antibiotik profilaksis dalam mencegah ILO diamati selama satu bulan *post* operasi dan efek samping antibiotik profilaksis berupa mual, muntah dan flebitis diamati *pre* operasi. Analisis uji bivariat menggunakan uji *chi-square* atau *fisher exact test* dilanjutkan analisis multivariat serta analisis *cost-effectiveness* menggunakan model *decision tree*.

Hasil penelitian menunjukkan *cefazolin* memiliki efektivitas yang sama dengan *ceftriaxon* sebagai profilaksis bedah obstetri dan ginekologi dalam mencegah kejadian ILO ($P = 0,724$). *Cefazolin* memiliki kejadian efek samping yang lebih rendah dibandingkan *ceftriaxone* (9,7% *vs* 29,2%; $P = 0,003$). Secara keseluruhan berdasarkan perhitungan menggunakan *decision tree* nilai efektivitas *cefazolin* lebih tinggi dibandingkan *ceftriaxone* yaitu (79,3% *vs* 63,8%) dan nilai *average cost-effectiveness ratio cefazoline* dan *ceftriaxone* masing-masing sebesar (Rp 9.724.363,- dan Rp12.048.201,-). Dapat disimpulkan *cefazoline* lebih *cost-effective* dibandingkan *ceftriaxone* sebagai profilaksis bedah obstetri dan ginekologi

Kata kunci : Antibiotik profilaksis, ILO, *ceftriaxone*, *cefazolin*, *cost effectiveness*

ABSTARCT

Cefazolin is an antibiotic that is recommended as a prophylactic antibiotic in obstetric and gynecological surgery by the Ministry of Health and the Indonesian Association of Obstetrics and Gynecology compared to ceftriaxone. This study aimed to compare the clinical outcome and safety of using cefazolin and ceftriaxone as prophylactic antibiotics and to determine the cost-effective efficacy of cefazolin and ceftriaxone in obstetric and gynecological surgical patients.

The study of a cost-effectiveness analysis study was conducted from a hospital perspective using a double-blind randomized trial design. The research was conducted in January - June 2020 at RSUD dr. Dradjat Prawiranegara Serang, with obstetric and gynecological surgery patients who met the inclusion criteria with a total of 82 subjects. Subjects were divided into two groups by block randomization, 41 subjects were given cefazolin and 41 subjects were given ceftriaxone. The effectiveness of prophylactic antibiotics in preventing SSI was observed during the postoperative week and side effects of prophylactic antibiotics in the form of nausea, vomiting, and phlebitis were observed preoperatively. Analysis of the bivariate test using the chi-square or test fisher exact test was continued Multivariate analysis and analysis cost-effectiveness using the model decision tree.

The results showed that cefazolin had the same effectiveness as ceftriaxone as a prophylactic for obstetric and gynecological surgery in preventing the incidence of SSI ($P = 0.724$). Cefazolin lower had incidence of side effects than ceftriaxone (9.8% vs 29.3%; $P = 0.003$). Overall, based on calculations using the decision tree, the effectiveness value of cefazolin is higher than ceftriaxone, namely (79.3% vs 63.8%) and the average cost-effectiveness ratio value. cefazoline and ceftriaxone, respectively (IDR 9,724,363 and IDR 12,048,201). It can be concluded that cefazoline is more cost effective than ceftriaxone as prophylaxis for obstetric and gynecological surgery.

Keywords: Antibiotic prophylaxis, SSI, ceftriaxone, cefazolin, cost-effectiveness