INTISARI

MELIASARI,J., 2019, UJI SENSITIVITAS *Escherichia coli* DARI URIN PASIEN INFEKSI SALURAN KEMIH DI RSUD KOTA SURAKARTA TERHADAP ANTIBIOTIK LEVOFLOKSASIN, KOTRIMOKSAZOL, SEFTRIAKSON, DAN AMOKSISILIN-KLAVULANAT., SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Escherichia coli merupakan penyebab infeksi saluran kemih tertinggi. Terjadi peningkatan resistensi *Escherichia coli*terhadap antibiotik di beberapa rumah sakit. Penelitian ini bertujuan mengetahui pola sensitivitas *Escherichia coli* terhadap antibiotik levofloksasin, kotrimoksazol, seftriakson, dan amoksisilin klavulanat di RSUD Kota Surakarta.

Penelitian ini merupakan eksperimental laboratorium dilakukan November 2018 hingga Januari 2019. Isolasi bakteri *Escherichia coli* dari urin sewaktu dengan media *Endo Agar* dilanjutkan uji mikroskopis dan uji biokimia. Uji sensitivitas menggunakan metode Kirby-Bauer dibandingkan dengan CLSI. Data dianalisis menggunakan standar deviasi *error bar* untuk melihat perbedaan *Escherichia coli* hasil isolasi dengan *Escherichia coli* ATCC 25922. Pola sensitivitas antar antibiotik dianalisis menggunakan tabulasi dan persentase.

Hasil penelitian menunjukkan dari 33 sampel terdapat 30 sampel positif *Escherichia coli*. Uji sensitivitas menunjukkan pola sensitivitas antibiotik levofloksasin 63,3% *susceptible* dan 36,7% *resistant*; kotrimoksazol 60% *susceptible,* 6,7% *intermediate,* dan 33,3% *resistant*; seftriakson 63,3% *susceptible* dan 36,7% *resistant;* amoksisilin-klavulanat 3,3% *susceptible* dan 96,7% *resistant*. Antibiotik levofloksasin dan seftriakson yang memiliki persentase terbesar memberikan hasil *susceptible*.

Katakunci : antibiotik, *Escherichia coli*, infeksi saluran kemih, sensitivitas,.

ABSTRACT

MELIASARI, J., 2019, SENSITIVITY TEST *Escherichia coli* FROM URINE OF URINARY TRACT INFECTION PATIENTS IN SURAKARTA CITY RSUD AGAINST ANTIBIOTICS OF LEVOFLOXACIN, COTRIMOXAZOL, CEFTRIAXON, AND AMOXICILIN-CLAVULANATE., THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Escherichia coli is the highest cause of urinary tract infections. An increase in *Escherichia coli* resistance to antibiotics in several hospitals. This study aimed to determine the pattern of *Escherichia coli* sensitivity to levofloxacin antibiotics, cotrimoxazole, ceftriaxone, and clavulanic amoxicillin in Surakarta City Hospital.

This study was an experimental laboratory conducted from November 2018 to January 2019. Isolation of *Escherichia coli* bacteria from the urine of patients suspected new UTIs came using Endo Agar media followed by microscopic testing and biochemical tests. Sensitivity tests using the Kirby-Bauer method compared to CLSI. Data were analyzed using standard error bar deviation tests to see differences in *Escherichia coli* from isolation with *Escherichia coli* ATCC 25922. Patterns of sensitivity between antibiotics were analyzed using tabulations and percentages.

The results showed that from 33 samples there were 30 positive samples of *Escherichia coli*. The sensitivity test showed the sensitivity pattern of levofloxacin antibiotics 63.3% susceptible and 36.7% resistant; cotrimoxazole 60% susceptible, 6.7% intermediate, and 33.3% resistant; ceftriaxone 63.3% susceptible and 36.7% resistant; amoxicillin-clavulanate 3.3% susceptible and 96.7% resistant. Levofloxacin and ceftriaxone are antibiotics which have the largest percentage give susceptible results.

Keywords: antibiotics, *Escherichia coli*, urinary tract infections, sensitivity.