

INTISARI

Listiani, E.I., 2017. Identifikasi Bakteri *Pseudomonas aeruginosa* Dan Uji Sensitivitas Terhadap Antibiotik Dari Sampel Ulkus Pasien Diabetes Melitus Di RSUD Dr. Moewardi. Program Studi D-IV Analis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Prevalensi penyakit diabetes melitus di Indonesia semakin meningkat, komplikasi yang ditimbulkan dapat berupa ulkus diabetik, pada jangka panjang akan menyebabkan infeksi kaki diabetik. Infeksi tersebut dapat disebabkan karena beberapa bakteri, salah satunya bakteri *Pseudomonas aeruginosa*. Masalah utama dari bakteri *P.aeruginosa* adalah berkembangnya mikroorganisme yang resisten terhadap berbagai jenis antibiotik. Penelitian ini bertujuan untuk mengetahui adanya *Pseudomonas aeruginosa* pada sampel ulkus pasien diabetes melitus di RSUD Dr. Moewardi dan uji sensitivitas terhadap antibiotik.

Penelitian ini bersifat analitik observasional dengan pendekatan cross sectional yaitu penelitian untuk mengetahui sensitivitas bakteri terhadap antibiotik dengan metode difusi. Penelitian ini dilakukan dengan cara mengisolasi bakteri *Pseudomonas aeruginosa* pada sampel ulkus pasien diabetes melitus yang kemudian diuji sensitivitasnya terhadap antibiotik.

Hasil isolasi sampel ulkus menunjukkan bahwa dari 50 sampel terdapat 14 sampel ulkus positif terdapat *Pseudomonas aeruginosa*. Hasil uji sensitivitas menunjukkan bahwa *Pseudomonas aeruginosa* 93% sensitif terhadap antibiotik imipenem, 76 % sensitif terhadap antibiotik amikacin dan siprofloksasin, 79 % sensitif terhadap antibiotik gentamicin 86 % sensitif terhadap antibiotik piperasilin, dan 50 % resisten terhadap antibiotik Sefotaxime.

Kata kunci : Ulkus diabetik, identifikasi, *Pseudomonas aeruginosa*, sensitivitas, antibiotik.

ABSTRACT

Listiani, E. I. 2017. Identification of *Pseudomonas aeruginosa* Bacteria and Sensitivity Test of Antibiotics from Ulcers Samples of Patients Suffering from Diabetes Mellitus in Regional Public Hospital (RSUD) of Dr. Moewardi. The Study Program of Four-Year Diploma (D-IV) in Medical Laboratory Technology. The Faculty of Health Sciences. Universitas Setia Budi.

Diabetes Mellitus prevalence in Indonesia is increasing. The complication resulted from this disease can be diabetic ulcer, in which in the long run, this will lead to diabetic foot infection. The infection can be caused by several bacteria, one of which is *Pseudomonas aeruginosa*. The main problem attributable to *Pseudomonas aeruginosa* is the development of microorganisms which are resistant to various types of antibiotics. This study aims at investigating the presence of *Pseudomonas aeruginosa* in ulcers samples of patients with Diabetes Mellitus in Regional Public Hospital (RSUD) of Dr. Moewardi and sensitivity test of antibiotics.

This research belongs to observational analytical study with cross-sectional approach, which is a study to investigate the sensitivity of bacteria on antibiotics using diffusion method. This study was carried out by isolating *Pseudomonas aeruginosa* bacteria in ulcers samples of patients with Diabetes Mellitus and testing the sensitivity of antibiotics.

The results of ulcers isolation reveal that 14 of 50 ulcers samples were positively infected by *Pseudomonas aeruginosa*. The results of sensitivity test indicates that *Pseudomonas aeruginosa* 93% were sensitive to imipenem antibiotic, 76% were sensitive to amikacin and ciprofloxacin antibiotics, 79% were sensitive to gentamicin antibiotic, 86% were sensitive to piperacillin antibiotic, and 50% were resistant to cefotaxime antibiotic.

Keywords: diabetic ulcers, identification, *Pseudomonas aeruginosa*, sensitivity, antibiotic.