

INTISARI

Shery , D. 2025. Identifikasi dan Uji Sensitivitas Antibiotik Terhadap *Staphylococcus aureus* dan *Proteus mirabilis* dari Sampel Ulkus Pasien Diabetes Mellitus. Program Studi D4 Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Diabetes mellitus merupakan penyakit metabolik yang dapat menimbulkan komplikasi berupa ulkus kaki diabetik yang rentan terinfeksi bakteri. Identifikasi bakteri seperti *Staphylococcus aureus* dan *Proteus mirabilis* serta uji sensitivitas antibiotik diperlukan agar terapi infeksi lebih tepat sasaran dan mencegah resistensi. Penelitian ini bertujuan untuk mengidentifikasi bakteri *Staphylococcus aureus* dan *Proteus mirabilis* dari sampel pus ulkus pasien diabetes mellitus serta mengetahui pola sensitivitasnya terhadap beberapa antibiotik.

Penelitian ini menggunakan desain analitik observasional dengan pendekatan *cross sectional*. Penelitian ini menggunakan 10 sampel ulkus yang dikultur pada media *Vogel Johnson Agar (VJA)* dan *Endo Agar (EA)*. Identifikasi dilakukan melalui pewarnaan Gram dan uji biokimia, sedangkan uji sensitivitas antibiotik dilakukan dengan metode Kirby-Bauer.

Hasil penelitian menunjukkan bahwa 6 dari 10 sampel teridentifikasi positif *Staphylococcus aureus* dan 1 sampel teridentifikasi positif *Proteus mirabilis*. Uji sensitivitas menunjukkan bahwa *S. aureus* pada 4 sampel sensitif dan 1 sampel resisten terhadap Vankomisin; 5 sampel sensitif dan 1 sampel intermediet terhadap Tetrasiklin; 3 sampel sensitif dan 3 sampel resisten terhadap Ciprofloxasin; serta 3 sampel sensitif dan 3 sampel intermediet terhadap Ampisilin. *P. mirabilis* sensitif terhadap Tetrasiklin dan Ciprofloxasin, tetapi resisten terhadap Vankomisin dan Ampisilin. Hasil ini diharapkan dapat menjadi acuan dalam pemberian terapi antibiotik yang tepat untuk pasien ulkus kaki diabetik.

Keywords : Diabetes mellitus, Ulkus kaki, *Staphylococcus aureus*, *Proteus mirabilis*, Uji Sensitivitas Antibiotik

ABSTRACT

Shery, D. 2025. Identification and Antibiotic Sensitivity Test of Staphylococcus aureus and Proteus mirabilis from Diabetic Foot Ulcer Samples. D4 Medical Laboratory Technology Program, Faculty of Health Sciences, Universitas Setia Budi.

Diabetes mellitus is a metabolic disease that can lead to complications such as diabetic foot ulcers, which are prone to bacterial infection. Identification of bacteria such as Staphylococcus aureus and Proteus mirabilis and antibiotic sensitivity testing are necessary to ensure targeted therapy and to prevent resistance. This study aimed to identify Staphylococcus aureus and Proteus mirabilis from pus samples of diabetic foot ulcers and to determine their sensitivity patterns to several antibiotics.

This study used an analytical observational design with a cross-sectional approach. Ten ulcer samples were cultured on Vogel Johnson Agar (VJA) and Endo Agar (EA). Identification was carried out using Gram staining and biochemical tests, while antibiotic sensitivity was tested using the Kirby-Bauer method.

The results showed that 6 out of 10 samples were positive for Staphylococcus aureus and 1 sample was positive for Proteus mirabilis. Sensitivity tests showed that S. aureus in 4 samples was sensitive and 1 was resistant to Vancomycin; 5 samples were sensitive and 1 was intermediate to Tetracycline; 3 samples were sensitive and 3 were resistant to Ciprofloxacin; and 3 samples were sensitive and 3 were intermediate to Ampicillin. P. mirabilis was sensitive to Tetracycline and Ciprofloxacin but resistant to Vancomycin and Ampicillin. These findings are expected to serve as a reference for the proper selection of antibiotic therapy for diabetic foot ulcer patients.

Keywords: *Diabetes mellitus, diabetic foot ulcer, Staphylococcus aureus, Proteus mirabilis, antibiotic sensitivity test*