

ABSTRAK

KAJIAN LINTAS SEKSIONAL RESISTANSI *Staphylococcus* sp. TERHADAP AMPICILLIN PADA PASIEN KUCING DI KLINIK HEWAN KABUPATEN SLEMAN DAN KOTA YOGYAKARTA

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Staphylococcus sp. merupakan bakteri Gram positif berbentuk *coccus* yang tersusun berpasangan, berkelompok menyerupai buah anggur. Bakteri ini umumnya dikenal sebagai bakteri patogen oportunistik yang sering menginfeksi hewan dan manusia. Infeksi yang disebabkan oleh bakteri biasanya ditangani dengan pemberian antibiotik. Namun, penggunaan antibiotik yang tidak tepat dapat memicu terjadinya resistansi antibiotik. Penelitian ini bertujuan untuk mengetahui tingkat resistansi serta menganalisis faktor risiko keberadaan dan resistansi *Staphylococcus* sp. terhadap *Ampicillin* pada pasien kucing di klinik hewan Kabupaten Sleman dan Kota Yogyakarta.

Penelitian ini menggunakan kajian lintas sektoral dengan 160 sampel ulas rektum pasien kucing di Klinik Hewan Kabupaten Sleman dan Kota Yogyakarta. Data pasien kucing dan pemiliknya diperoleh melalui wawancara menggunakan kuesioner yang berisikan pertanyaan terkait faktor risiko yang berhubungan dengan keberadaan *Staphylococcus* sp. serta resistansinya terhadap antibiotik. Isolasi dan identifikasi *Staphylococcus* sp. dilakukan menggunakan media *Mannitol Salt Agar*, pengecatan Gram, serta uji biokimia seperti uji katalase, koagulase, *Voges-Proskauer*, dan fermentasi manitol. Pengujian sensitivitas *Staphylococcus* sp. terhadap *ampicillin* dilakukan dengan metode *Kirby-Bauer* pada media *Mueller Hinton Agar*. Data dianalisis menggunakan analisis univariat secara deskriptif dan analisis bivariat dengan uji *Chi-square*.

Hasil penelitian menunjukkan sebanyak 51 isolat teridentifikasi *Staphylococcus* sp. (31,9%). Hasil resistan terhadap *ampicillin* ditemukan pada 38 isolat (74,5%), 8 isolat (15,7%) kategori intermediet dan 5 isolat (9,8%) kategori sensitif. Faktor risiko menggondong (X^2 : 6,029; P: 0,014; OR: 0,272) dan memandikan (X^2 : 5,740; P: 0,017; OR: 0,424) berasosiasi terhadap keberadaan *Staphylococcus* sp. serta jenis pakan komersial (X^2 : 7,800; P: 0,005; OR: 7,286) berasosiasi terhadap terjadinya resistansi *ampicillin*. Faktor lain tidak menunjukkan adanya asosiasi dengan keberadaan dan resistansi *Staphylococcus* sp. terhadap *ampicillin*. Disimpulkan bahwa *Staphylococcus* sp. resistan terhadap *ampicillin* pada kucing di Kabupaten Sleman dan Kota Yogyakarta, dengan faktor menggondong, memandikan, serta jenis pakan komersial berasosiasi dengan keberadaan dan resistansi bakteri tersebut.

Kata kunci: *Ampicillin*, faktor risiko, kajian lintas sektoral, kucing, resistansi, *Staphylococcus* sp.

ABSTRACT

A CROSS-SECTIONAL STUDY OF *Staphylococcus* sp. RESISTANCE TO AMPICILLIN IN FELINE PATIENTS AT VETERINARY CLINICS IN SLEMAN AND YOGYAKARTA

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Staphylococcus sp. is a Gram-positive cocciform bacterium arranged in pairs, forming grape-like. These bacteria are generally known as opportunistic pathogens that frequently infect animals and humans. Infections caused by these bacteria are typically treated with antibiotics. However, improper use of antibiotics can trigger antibiotic resistance. This study aimed to determine the resistance level and analyze the risk factors for the presence and resistance of *Staphylococcus* sp. to *ampicillin* in feline patients at animal clinics in Sleman and Yogyakarta.

This study employed a cross-sectional design with a total of 160 rectal swab samples from feline patients at animal clinics in Sleman and Yogyakarta. Information regarding feline patient and owner data was obtained through interviews using questionnaires containing questions related to risk factors associated with the presence of *Staphylococcus* sp. and its resistance to antibiotics. Isolation and identification of *Staphylococcus* sp. were performed using *Mannitol Salt Agar* medium, Gram staining, and biochemical tests such as catalase, coagulase, *Voges-Proskauer*, and mannitol fermentation tests. Sensitivity testing of *Staphylococcus* sp. to *ampicillin* was conducted using the *Kirby-Bauer* method on *Mueller Hinton Agar* medium. Data were analyzed using descriptive univariate analysis and bivariate analysis with the *Chi-square* test.

The results showed that 51 isolates were identified as *Staphylococcus* sp. (31,9%). Resistance was found in 38 isolates (74,5%), 8 isolates (15,7%) were categorized as intermediate, and 5 isolates (9,8%) were sensitive to *ampicillin*. Risk factors of carrying (X^2 : 6,029; P: 0,014; OR: 0,272) and bathing (X^2 : 5,740; P: 0,017; OR: 0,424) were associated with the presence of *Staphylococcus* sp., and the type of commercial feed (X^2 : 7,800; P: 0,005; OR: 7,286) was associated with the occurrence of *ampicillin* resistance. Other factors showed no association with the presence and resistance of *Staphylococcus* sp. to *ampicillin*. It can be concluded that *Staphylococcus* sp. is resistant to *ampicillin* in cats in Sleman and Yogyakarta, with factors such as carrying, bathing, and commercial feed type associated with the presence and resistance of the bacterium.

Key words: *Ampicillin*, cat, cross-sectional study, resistance, risk factor, *Staphylococcus* sp.