



CASE STUDY OF GALLBLADDER MUCOCELE AND TREATMENT USED IN SMALL ANIMALS

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SCHOOL OF VETERINARY MEDICINE AND BIOMEDICAL SCIENCES
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ABSTRAK

REGINE YEO ZHI SHUEN. Studi Kasus *Gallbladder Mucocele* dan Pengobatan Digunakan pada Hewan Kecil. Dibimbing oleh DENI NOVIANA dan TRIOSO PURNAWARMAN.

Gallbladder mucocele (GM) didefinisikan sebagai distensi kandung empedu yang disebabkan oleh akumulasi atau endapan cairan empedu dengan konsentrasi tinggi. Tujuan dari studi kasus ini adalah mempelajari kondisi GM pada hewan kecil dan melaporkan tanda klinis dan karakteristik GM melalui interpretasi sonogram dan evaluasi kimia darah, serta studi terkait terapi yang diberikan dan pengobatan lain yang direkomendasikan. Pada studi kasus ini, seekor anjing Toy Poodle yang berusia 14 tahun telah didiagnosis menderita GM parah dan kolesistitis. Tidak ada tanda-tanda nyeri yang ditunjukkan selama pemeriksaan fisik karena asimtomatik merupakan karakteristik umum pada tahap awal penyakit terkait empedu. Data interpretasi ultrasonografi abdomen dan evaluasi kimia darah dilakukan pada tahun 2021-2022 dan dianalisis sebagai sumber data sekunder. Hasil sonogram menunjukkan kehadiran massa hyperechoic, deposit bahan padat yang tidak bergerak, penebalan dinding empedu, pembesaran ukuran empedu, diikuti dengan peningkatan yang signifikan dalam enzim alkaline phosphatase (ALP). Studi kasus ini telah merangkum terutama diagnosis dan perawatan GM pada hewan kecil dan pengobatan alternatif yang sesuai direkomendasikan untuk menghadapi kondisi GM pada hewan kecil. Efektivitas terapi kombinasi menunjukkan dampak positif pada pasien, kondisi GM telah terkendali.

Kata kunci: Hewan kecil, *Gallbladder Mucocele (GM)*, *Biliary Sludge*, Ultrasonografi Abdomen, Kandung Empedu



ABSTRACT

REGINE YEO ZHI SHUEN. Case Study of Gallbladder Mucocele and Treatment Used in Small Animals. Supervised by DENI NOVIANA and TRIOSO PURNAWARMAN.

Gallbladder mucocele (GM) is defined as distention of the gallbladder caused by an inappropriate accumulation or deposition of high concentrations of bile. The purpose of this case study is to study GM conditions in small animals and to report the clinical sign and characteristics of GM through the sonogram interpretation and blood chemistry test evaluation, and studies related to the therapy given and other treatments recommended. A 14-year-old Toy Poodle dog has been diagnosed with severe GM and cholecystitis. No pain signs were shown during the physical examination as asymptomatic is a common characteristic in the early stage of biliary related diseases. In this study Abdominal ultrasonography interpretation and blood chemistry evaluation was conducted in 2021-2022 and analyzed as a secondary data source. Ultrasonography results showed presence of hyperechoic, immobile deposits in gallbladder accompanied by wall thickening and enlarged in size, followed by a significant increase in the enzyme alkaline phosphatase (ALP). This study has summarized mainly the diagnosis and treatments of GM in small animals and suitable alternatives treatments were recommended to encounter the GM conditions in small animals. The effectiveness of combined therapy shows the positive impact on the patient, the condition of GM has been under control.

Keywords: Small animals, Gallbladder Mucocele (GM), Biliary Sludge, Abdominal Ultrasonography, Gallbladder



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CASE STUDY OF GALLBLADDER MUCOCELE AND TREATMENT USED IN SMALL ANIMALS

REGINE YEO ZHI SHUEN

Undergraduate thesis
As one of the requirements to obtain a
Bachelor's degree at the
School of Veterinary Medicine and Biomedical Sciences

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While completing this thesis, the author faced many challenges and obstacles. The author realizes that this research will only be completed with the help of several parties. The author is overwhelmed with all humility and gratitude to acknowledge his depth and to everyone who has helped him convey these ideas far beyond simplicity and into something concrete. Therefore, the author would like to take this opportunity to express special thanks to the people who played a significant role during this process.

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The writer would love to end this text by acknowledging that this research is far from perfect and offering apologies for the errors made in the process. The writer also hopes that this research could benefit any readers. Hopefully, this scientific work is helpful for those who need it and for advancing science.

Bogor, July 2023

Regine Yeo Zhi Shuen

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1 Approval of the SKHB IPB Animal Ethics Commission
2 Curriculum Vitae