



CASE STUDY OF FELINE DIABETIC KETOACIDOSIS: CLINICOPATHOLOGICAL FINDINGS, DIAGNOSTIC WORK-UP, THERAPEUTIC MANAGEMENT AND OUTCOME

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ABSTRACT

SAWETTA CHANDRASEGARAN. Case Study of Feline Diabetic Ketoacidosis: Clinicopathological Findings, Diagnostic Work-Up, Therapeutic Management and Outcome. Supervised by ANITA ESFANDIARI and SUS DERTHI WIDHYARI.

Diabetic Ketoacidosis in cats is a serious metabolic condition that occurs as a complication of diabetes mellitus. It involves severe hyperglycemia, ketonemia, metabolic acidosis and electrolyte imbalance. In this case study, an 11-year-old mixed breed female cat was presented to Bukit Gasing Veterinary Hospital in Selangor, Malaysia with multiple signs including: polyuria, polydipsia, anorexia, weakness and hematuria. This case illustrates the complex pathophysiological processes involved in diabetic ketoacidosis in cats and the critical need for early recognition, intensive monitoring, and prompt intervention to promote a favorable outcome. The findings from this case report further underscore the importance of combining the clinical presentation with laboratory data for diagnostic purposes. Additionally, this report should increase awareness and improve understanding of how to manage diabetic ketoacidosis in cats in Malaysia.

Keywords: Diabetes Mellitus, Electrolyte Imbalance, Feline Diabetic Ketoacidosis
Hyperglycemia, Insulin Therapy, Ketosis

ABSTRAK

SAWETTA CHANDRASEGARAN. Studi Kasus Ketoasidosis Diabetik pada Kucing: Presentasi Klinis, Pemeriksaan Diagnostik, Penatalaksanaan Terapi, dan Hasil Klinis. Dibimbing oleh ANITA ESFANDIARI dan SUS DERTHI WIDHYARI.

Ketoasidosis diabetik pada kucing merupakan kondisi metabolik serius yang terjadi sebagai komplikasi dari diabetes mellitus. Kondisi ini melibatkan hiperglikemia berat, ketonemia, asidosis metabolik, dan ketidakseimbangan elektrolit. Dalam laporan kasus ini, seekor kucing betina campuran berusia 11 tahun dibawa ke Bukit Gasing Veterinary Hospital di Selangor, Malaysia dengan berbagai tanda klinis termasuk poliuria, polidipsia, anoreksia, kelemahan, dan hematuria. Kasus ini menggambarkan kompleksitas proses patofisiologis yang terlibat dalam ketoasidosis diabetik pada kucing dan pentingnya deteksi dini, pemantauan intensif, serta intervensi cepat untuk memperbaiki prognosis. Temuan laporan kasus ini menegaskan pentingnya mengombinasikan gambaran klinis dengan data laboratorium dalam penegakan diagnosis, serta meningkatkan kesadaran dan pemahaman mengenai manajemen ketoasidosis diabetik pada kucing di Malaysia.

Kata kunci: Diabetes Melitus, Hiperglikemia, Ketidakseimbangan Elektrolit,
Ketoasidosis Diabetik Felin, Ketonemia, Terapi Insulin

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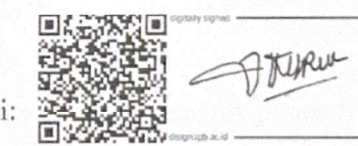


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PREFACE

The author expresses sincere gratitude for the guidance and support that enabled the completion of this research. The theme chosen for this research, conducted from November 2025 to April 2026, is the “Case Study of Feline Diabetic Ketoacidosis: Clinicopathological Findings, Diagnostic Work-Up, Therapeutic Management and Outcome”.

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May this work be beneficial to those in need and contribute to the advancement of scientific knowledge.

Bogor, July 2026

Sawetta Chandrasegaran



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