



UNIVERSITI PUTRA MALAYSIA

***SKIN CONDITIONS OF DOGS PRESENTED TO UNIVERSITY
VETERINARY HOSPITAL, JAN-DEC 2014***

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**SKIN CONDITIONS OF DOGS PRESENTED TO
UNIVERSITY VETERINARY HOSPITAL, JAN-DEC
2014**

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It is hereby declared that we have read this project paper entitled “Skin Conditions of Dogs Presented to University Veterinary Hospital, Jan-Dec-2014”, by Norehan Binti Hasim and in our opinion, it is satisfactory in terms of scope, quality, and presentation as partially fulfillment of requirement for the course VPD4999 – Final Year Project.

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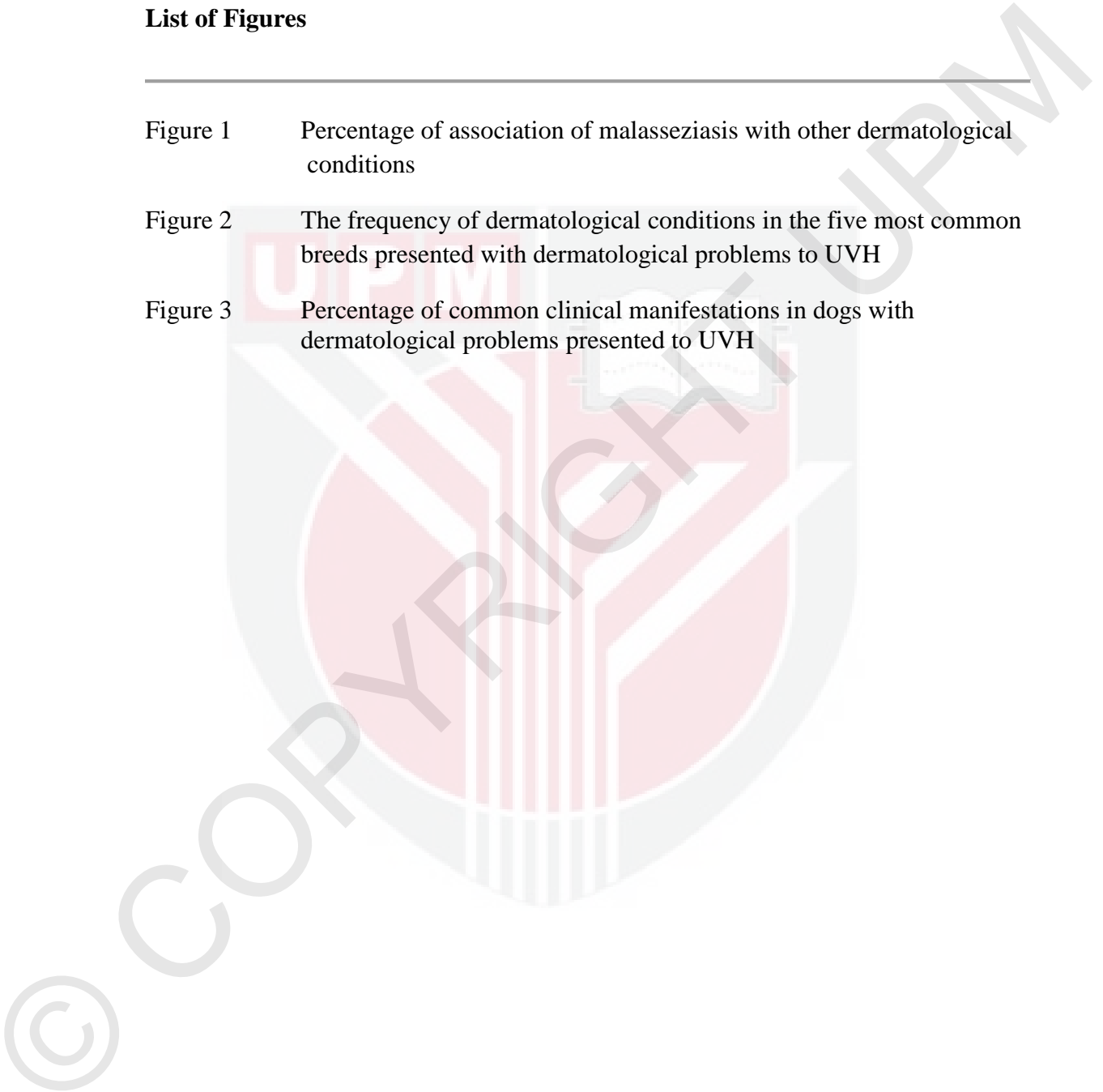
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ABSTRACT

An abstract of the project paper presented to the Faculty of veterinary medicine in partial fulfilment of the course VPD 4999 – Project

SKIN CONDITIONS OF DOGS PRESENTED TO UNIVERSITY VETERINARY HOSPITAL, JAN-DEC-2014

by

NOREHAN BINTI HASIM

February, 2015

Supervisor: Associate Prof. Dr. Gurmeet Kaur Dhaliwal

Co-supervisor: Associate Prof. Dr. Malaika Watanabe

A retrospective study was conducted to determine the prevalence of dermatological conditions in dogs presented to University of Veterinary Hospital (UVH), Faculty of Veterinary Medicine, Universiti Putra Malaysia, including the clinical manifestations, depth of investigation performed, and the risk factors for the most common skin conditions encountered. Of 1827 dogs presented to UVH from January 1st to December 31st 2014, 615 dogs were presented with dermatological problems, resulting in a prevalence of 33.66%. Erythema (15.99%) was the most common presenting clinical sign, followed by alopecia (13.38%), pruritus (12.88%),

maculo-papular-pustular eruptions (11.01%) and scaling (9.33%). The five most common final diagnoses in descending order were malasseziasis, dermatophytosis, otitis externa, neoplasia and cutaneous myiasis. The acetate tape test (32.24%) was the most common diagnostic procedure performed, followed by trichograms (20.39%) and skin scrapes (13.93%). In dogs with malasseziasis, there was no association with age, sex, neuter status nor body condition score (BCS). However, dermatophytosis was significantly associated with the age where older dogs above 6 years of age had a 70% lower risk to have the disease compared to younger dogs. Otitis externa was significantly associated with the age, sex and BCS where females had as 50% lower risk compared to males, and the relative risk was nearly twice in obese and older dogs compared to the others. The top five breeds that were presented for dermatological conditions were mixed breed dogs, Shih Tzus, German Shepherds, Poodles and Cocker Spaniels.

Keyword: canine, skin conditions, erythema, malasseziasis, acetate tape test

ABSTRAK

Abstrak daripada kertas projek dikemukakan kepada Fakulti Perubatan Veterinar bagi memenuhi sebahagian daripada keperluan kursus VPD 4999 – Projek

**MASALAH KULIT PADA ANJING DI UNIVERSITI HOSPITAL
VETERINAR, 2014**

oleh

NOREHAN BINTI HASIM**Februari, 2015****Penyelia: Prof. Madya Dr. Gurmeet Kaur Dhaliwal****Penyelia bersama: Prof. Madya Dr. Malaika Watanabe**

Satu kajian retrospektif telah dijalankan untuk menentukan kelaziman masalah dermatologi pada anjing di Universiti Hospital Veterinar (UVH), Fakulti Perubatan Veterinar, Universiti Putra Malaysia, termasuk manifestasi klinikal, kedalaman penyiasatan yang dilakukan, dan faktor risiko bagi masalah kulit yang paling biasa dihadapi. Daripada 1827 anjing, dari 1 Januari hingga 31 Disember 2014, 615 kes melibatkan masalah dermatologi, menjadikan kelazimannya 33.66%. Eritema (15.99%) adalah petanda paling biasa, diikuti dengan alopesia (13.38%), pruritus (12.88%), letusan *macular-papular-pustular* (11.01%), dan kulit bersisik

(9.33%). Diagnosis akhir yang paling biasa ialah malasseziasis, dermatofitosis, otitis eksterna, neoplasia dan miasis kulit. Pita asetat (32.24%) adalah prosedur diagnostik yang paling biasa dilakukan, diikuti oleh *trichogram* (20.39%) dan *scraping* kulit (13.93%). Bagi malasseziasis, tidak ada faktor pendorong yang jelas mengikut umur, jantina, status pemandulan dan skor keadaan badan (BCS). Walau bagaimanapun, terdapat hubungan yang signifikan antara dermatofitosis dengan umur di mana anjing yang berumur lebih dari 6 tahun berisiko 70% lebih rendah berbanding anjing yang lebih muda. Otitis eksterna pula mempunyai kaitan dengan umur, jantina dan skor keadaan badan di mana otitis eksterna di kalangan anjing betina berlaku 50% lebih rendah berbanding anjing jantan, dan risiko relatif hampir dua kali ganda pada anjing gemuk dan anjing tua. Masalah dermatologi dihadapi kebanyakannya dalam baka tempatan, *Shih Tzu*, *German Shepherd*, *Poodle* and *Cocker Spaniel* secara keseluruhannya.

Kata kunci: Anjing, masalah kulit, eritema, malasseziasis, pita asetat

1.0 INTRODUCTION

As the largest organ of the body, the skin provides a variety of functions including the protection of the tissues, regulations of body temperature, as an excretory organ, cutaneous sensation, and vitamin D production. According to Martini and Welch (2001), any abnormalities to the skin are easily recognized due to the facts of the skin is the most visible organ of the body.

There are numerous agents that can cause skin problems in dogs including trauma, allergens, external irritants, burns and infectious agents such as bacteria, fungus, virus and parasite (Moriello *et al.*, 2015). Some of the endocrine diseases and metabolic problems may also cause changes skin structure and induce cutaneous lesions, such as hypothyroidism which is the most common endocrine skin disease in dogs (Paterson, 2008).

There have been several studies done to determine the prevalence of the skin conditions in dogs in other countries and from the nineties, dermatological problems have been reported to be one of the most prevalent seen in veterinary practices. However, in Malaysia, there are hardly any references for overall prevalence of skin diseases of dogs, the most commonly diagnosed diseases, the type and extent of procedures used for diagnosis and the risk factors for the common diseases, if present.

1.1 Objectives of study

Considering the paucity of information in Malaysia, regarding common canine skin conditions encountered, the prevalence, clinical signs and the type and frequency of diagnostic procedures used for dermatological investigation, the objectives of this study were to:

1. determine the overall prevalence of skin condition of dogs presented to the University Veterinary Hospital (UVH) during a one year period, Jan-Dec 2014
2. report the clinical manifestations for the most common skin conditions of dogs, including the most common diagnostic procedures used
3. determine the risk factors for the most common skin conditions in dogs

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